



U.S. Department
of Transportation

**Federal Aviation
Administration**

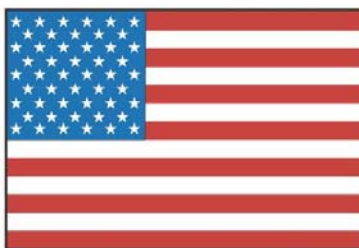
AFS-600

Regulatory Support Division

ADVISORY CIRCULAR

43-16A

AVIATION MAINTENANCE ALERTS



**ALERT
NUMBER
334**



**MAY
2006**

CONTENTS

AIRPLANES

| | |
|-------------------------|----|
| AMERICAN CHAMPION | 1 |
| BEECHCRAFT | 4 |
| CESSNA | 5 |
| PIPER | 12 |
| RAYTHEON | 17 |

HELICOPTERS

| | |
|------------------|----|
| AGUSTA | 18 |
| EUROCOPTER | 19 |

ACCESSORIES

| | |
|------------------------------|----|
| LAMAR STARTER | 19 |
| SHADIN FUEL TRANSDUCER | 19 |

AIR NOTES

| | |
|--|----|
| ELECTRONIC VERSION OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT | 20 |
| PAPER COPY OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT | 20 |
| INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE | 20 |
| IF YOU WANT TO CONTACT US | 21 |
| AVIATION SERVICE DIFFICULTY REPORTS | 22 |

**U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
WASHINGTON, DC 20590**

AVIATION MAINTENANCE ALERTS

The Aviation Maintenance Alerts provide a common communication channel through which the aviation community can economically interchange service experience, cooperating in the improvement of aeronautical product durability, reliability, and safety. This publication is prepared from information submitted by those who operate and maintain civil aeronautical products. The contents include items that have been reported as significant, but have not been evaluated fully by the time the material went to press. As additional facts such as cause and corrective action are identified, the data will be published in subsequent issues of the Alerts. This procedure gives Alerts' readers prompt notice of conditions reported via a Mechanical Reliability Report (MRR), a Malfunction or Defect Report (M or D), or a Service Difficulty Report (SDR). Your comments and suggestions for improvement are always welcome. Send to: FAA; ATTN: Aviation Data Systems Branch (AFS-620); P.O. Box 25082; Oklahoma City, OK 73125-5029.

(Editor's notes are provided for editorial clarification and enhancement within an article. They will always be recognized as italicized words bordered by parentheses.)

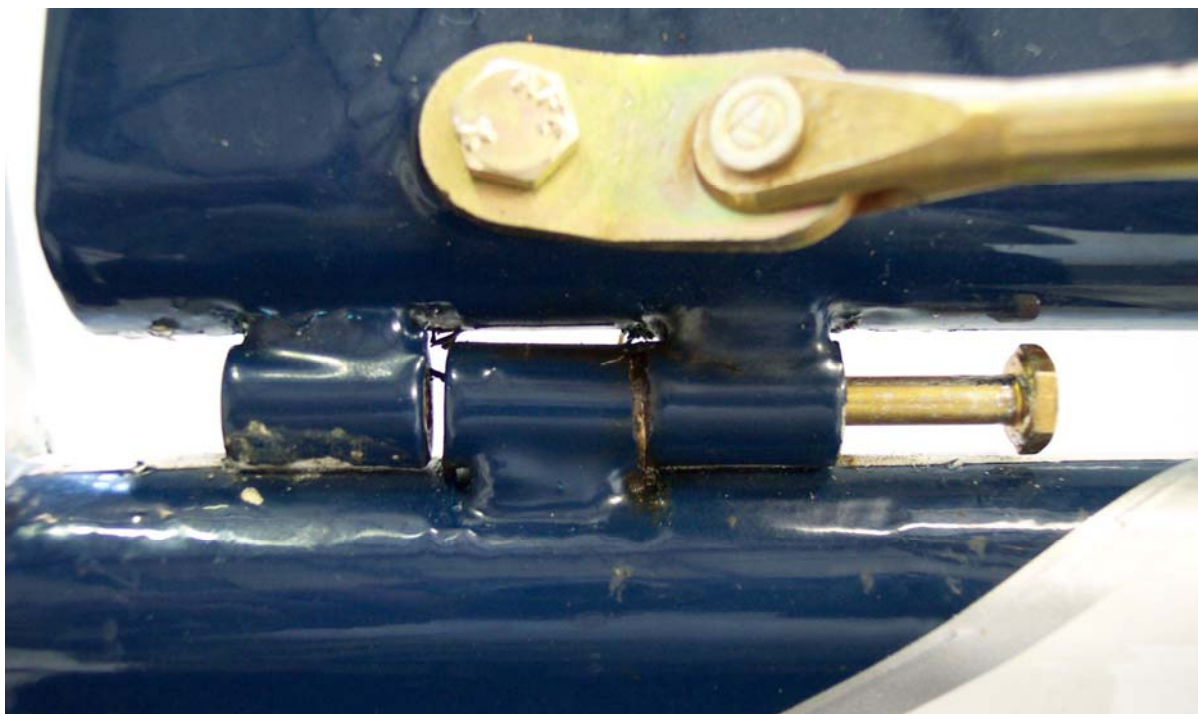
AIRPLANES

AMERICAN CHAMPION

American Champion: 8KCAB; Scored Elevator Hinge Bolts; ATA 5520

(This report was submitted last year, but personal contact and color photos have provided heretofore unappreciated "depth" of the discrepancy. Also described are the aircraft's rudder hinge bolts--but filed under ATA code 5540.)

Chief Inspector James Kelly of Embry-Riddle Aeronautical University was less than happy in finding the same mechanical discrepancies in two relatively new *Super Decathlon* aircraft under his charge. "During preflight the pilot found excessive movement in the left outboard elevator hinge pin. Maintenance removed both elevators and the rudder and found longitudinal scoring on all the hinge bolts (AN23-40) apparently caused during manufacture of the aircraft. The longitudinal scoring was caused by the center needle bearing (P/N B34PS) on the elevator and the rudder. Circumferential scoring was also present on all bolts apparently caused by improperly aligned and reamed bushings (P/N 1-3737-1) on the horizontal and vertical stabilizer hinges. The manufacturer was contacted concerning this problem. This same condition is present in...(our second aircraft)." "We removed and replaced all bearings and aligned them during installation so the new bolts just slid into the bearings without any force."





(Thanks, Pat, for the very clear photos. Other owner/operators of these aircraft should consider following your actions.)

Part Total Time: 335.0 hours.

BEECHCRAFT**Beechcraft: 1900C; Damaged Bellcrank Supports; ATA 2730**

“In attempting to rig the elevator system,” writes this mechanic, “it was discovered the rigging hole for the forward elevator bellcrank (P/N 50-420011-77) was damaged in the upper elevator bellcrank support. (Apparently)...the hole had been torn by movement of the bellcrank with the rig pin installed. Additionally, it was discovered the rigging hole in the lower bellcrank support (P/N 50-420011-77) did not exist; i.e., it had never been drilled.” (*Fuselage station number given as 115.3 inches.*)





Part Total Time: 21,352.0 hours.

CESSNA

Cessna: Single Engine Airplane Fuel Strainers; (*orientation concerns*); ATA 2821

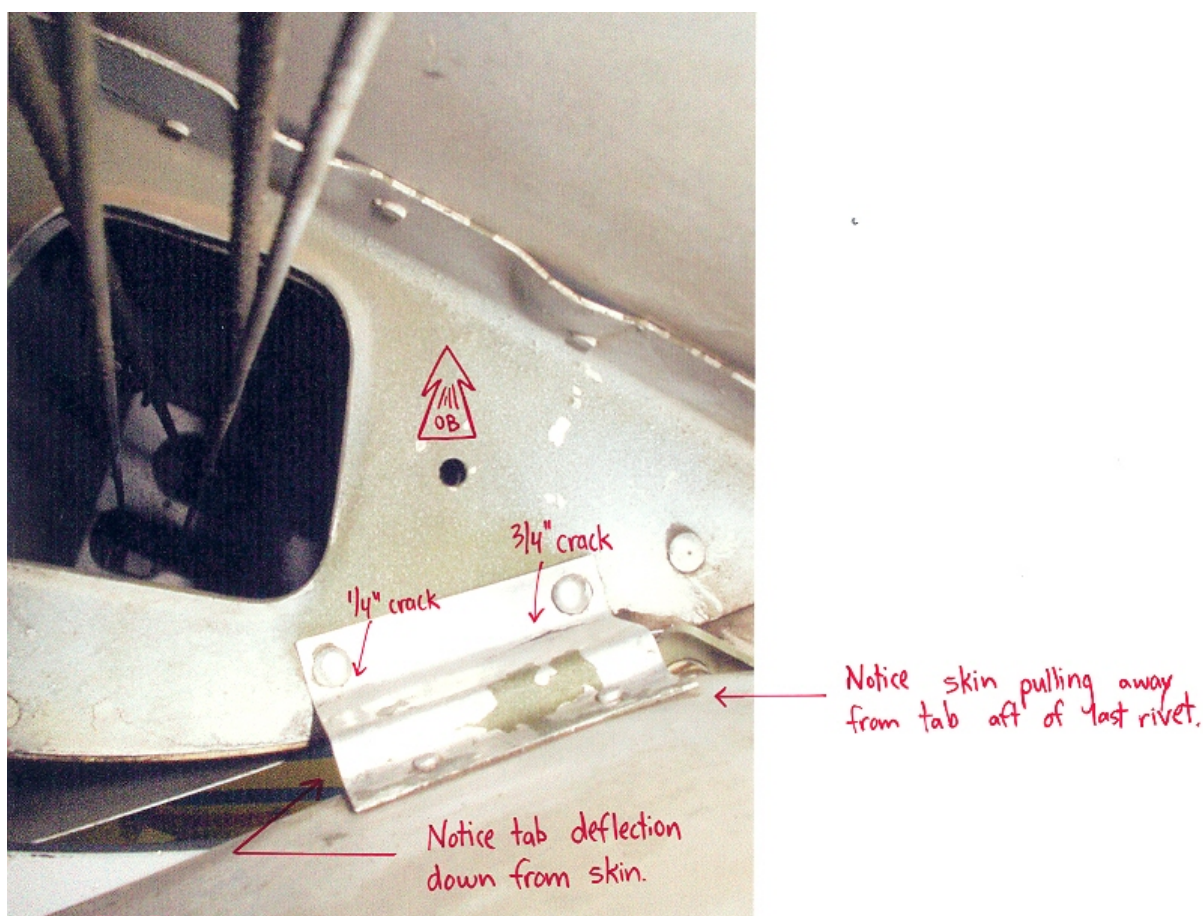
(The following safety article from the Wichita Aircraft Certification Office is published as received. Contact information is found at the discussion's end.)

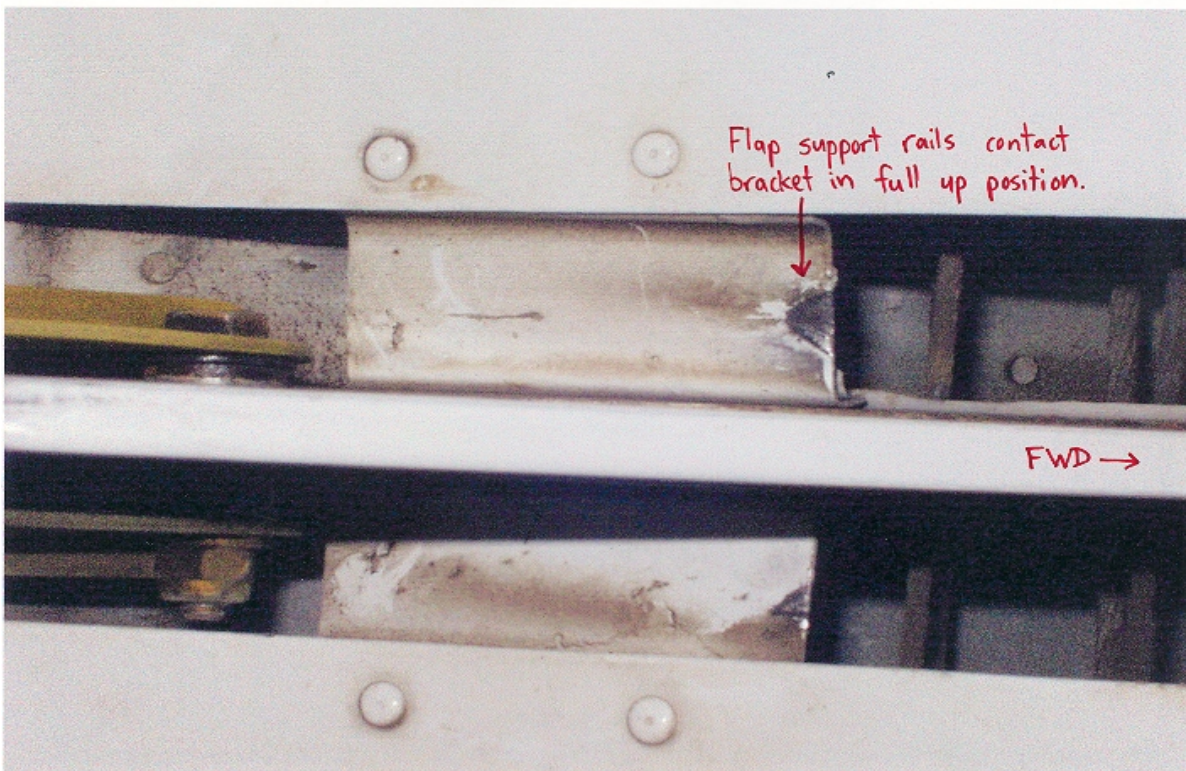
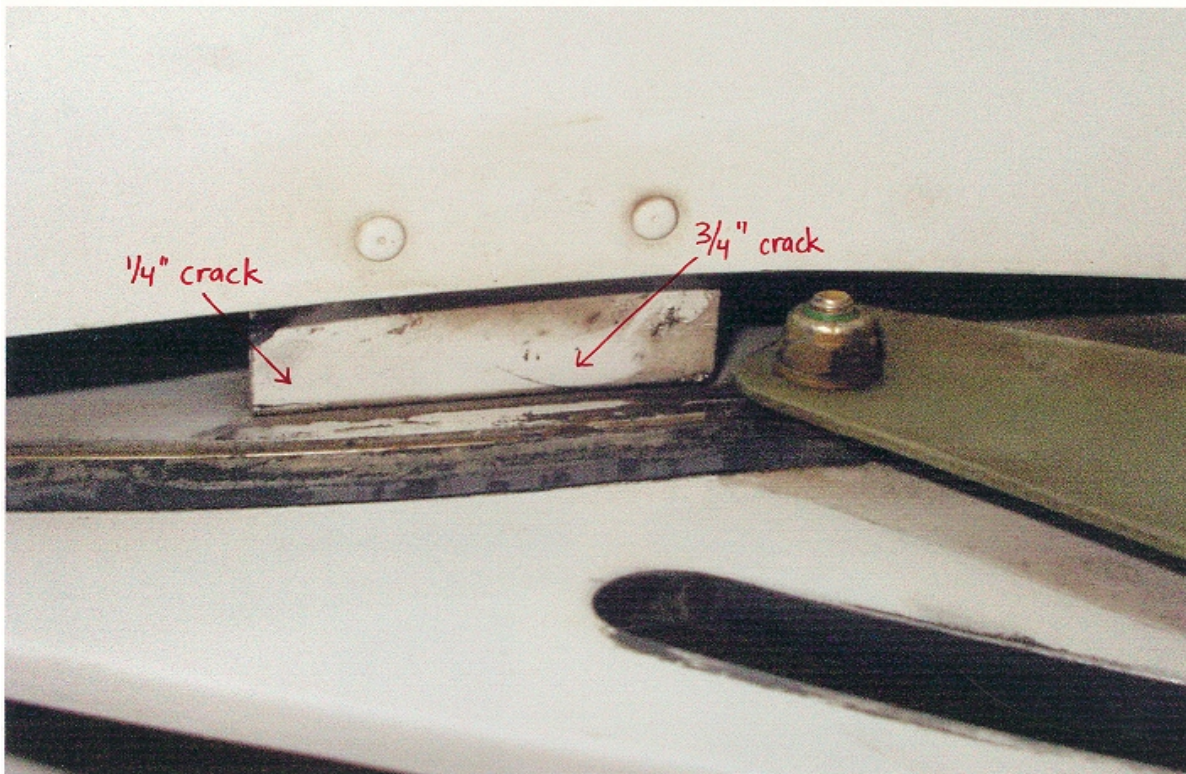
“The FAA has been advised that some fuel strainer assemblies may have been originally installed or are being put back into service improperly. Airplanes may have the fuel strainer assembly installed with the fuel flow arrow oriented against the fuel flow path. In this configuration, although fuel may freely flow, fuel system contaminants may not be removed from the fuel system during a normal pre-flight check of the fuel strainer. We recommend all owners and operators check the fuel flow arrow orientation on their fuel strainers at the next inspection interval to be sure the fuel flow direction arrows are oriented properly. Refer to the applicable airplane model maintenance/service manual or applicable service bulletin/letter for the proper orientation of the fuel flow direction arrow on the fuel strainer.” *(For further information please contact Mr. Jeff Janusz, aerospace engineer; Wichita Aircraft Certification Office, 1801 Airport Road., Room 100, Wichita, KS. 67209 Phone 316-946-4148.)*

Part Total Time: (n/a).

Cessna: 172P; Cracked Bracket—Wing T.E. Skin Support; ATA 5753

This mechanic writes, "The wing trailing edge skin support bracket (*P/N 0523231-24*) cracked in the bend radius. The specific location of the cracked part is inboard of the R/H flap track rib as station 39.0 inches. This part has a $\frac{1}{4}$ inch crack from the leading edge of the tab aft—and another crack in the same bend radius $\frac{3}{4}$ inch from the trailing edge of the tab, forward. The bend radius cracked is the one nearest the flap track rib. The tab appears to be under excessive stress. It is deflected down as viewed from the front of the aircraft facing aft. (*Here*)...the trailing edge wing skin makes a significant increase in it's curve--aft of the last tab attaching rivet--as view from the outboard edge of the skin, looking inboard through the flap track slot. Inspection of our fleet (*including*) Cessna 152(s), a 172, a 172RG, and 182(s) revealed similar conditions on many of the brackets and/or cracked wing skins at the bracket attach point. There is very little clearance between these brackets and the flap support rails. Any cracking or excessive deformation can cause the flap support rails to grab the bracket upon retraction, resulting in failure of the flap and possible loss of control of the aircraft. It is my opinion that a revised flap support bracket be designed and installed in such a (*manner*) as to alleviate the stresses imposed on the bracket and to increase the clearance between the flap support rails and the bracket." (*A search of the SDRS data base yields two similar defect entries. Of course, entering a generic 172 generates 59 assorted entries for this ATA code.*)



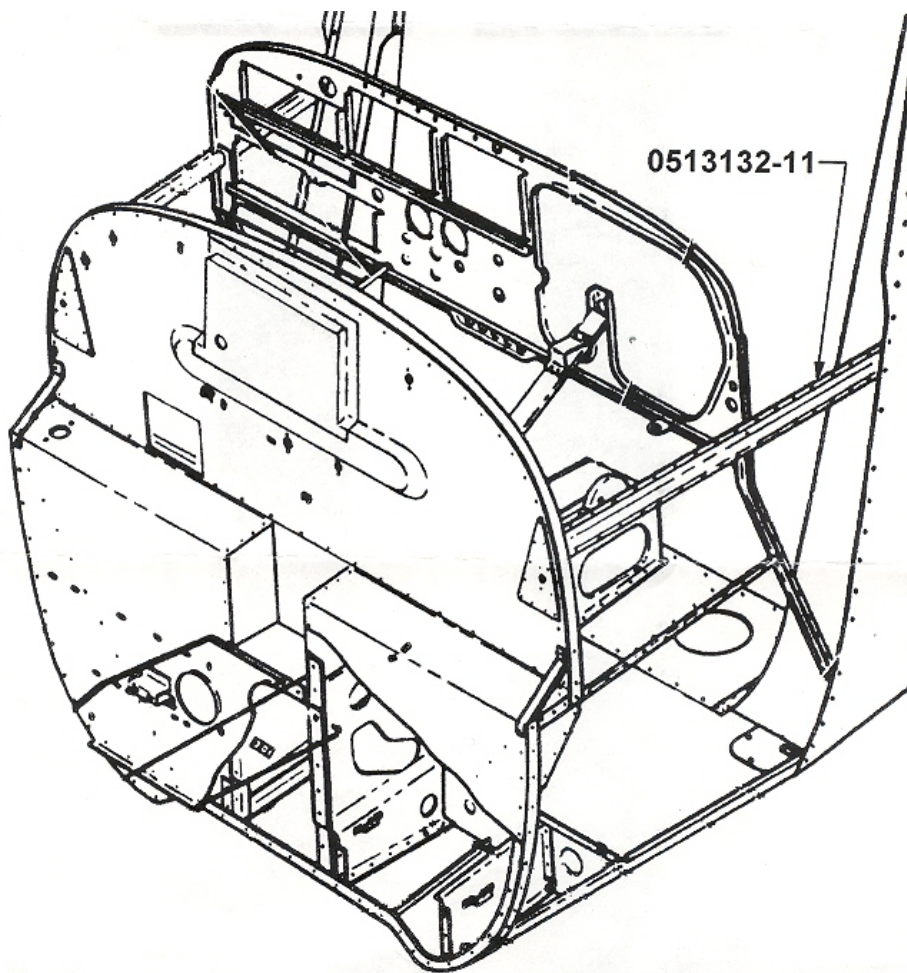


Part Total Time: 11,427.4 hours.

Cessna: Series 172, R172 175; Cracked Engine Mount Attach Bracket; ATA 5313

(The following safety article from the Wichita Aircraft Certification Office is published as received. Contact information is found at the discussion's end.)

“The FAA recently received a report of a Cessna Model 175 losing an engine, engine mount and firewall. A close examination of the failure showed that the 0513132-11 bracket had numerous cracks that finally released the upper engine mount attach bolt, producing the failure. A search of SDR's produced 57 reports of failures of -0513132-11 brackets. The brackets were used on Cessna model 172's, 175's and R172's. A disproportionate number of failures were on 175's, R172's, and STC'd 172's, all with heavier engines than the 172's. The 0513132-11 bracket was used from the first 172's and 175 through the 1979 model year. The area is difficult to inspect because the engine mount bolts need to be removed, and the brackets are often covered with insulation.” *(For further information please contact Mr. Gary Parker, aerospace engineer; Wichita Aircraft Certification Office, 1801 Airport Road., Room 100, Wichita, KS. 67209 Phone 316-946-4107.)*



Part Total Time: (n/a)

Cessna: 180; Wing Structure Corrosion; ATA 5710

(The following letter and photographs were received from Mr. Luis Cuestas and Mr. Gerardo Bean, both engineers working for the Aeronautical Certification Directorate in Argentina. Slight redaction of the multilingual writer's submission is to be taken as a compliment: this editor is limited to a single language about which a struggle ensues every day. The substance of this letter begins after its preamble, which included permissions to publish their material.)

"I would like to tell you specifically about the events...*(concerning this aircraft)*. At the end of 2004, a repair station found severe corrosion in the front and rear wing *(to)* fuselage attachments of a Cessna 180 during a maintenance inspection. There was so much corrosion *(many of the rivets had broken off the wing's rear attachment)*, and when the corrosion was removed many more rivets *(literally—fell out)*.

"(The owner of this aircraft had neglected its proper care and maintenance.) This aircraft has an Aero-Application Kit installed *(agriculture spraying equipment)*, and apparently--it had been in the open for weeks and had not been appropriately cleaned *(...after equipment use.)* *(In the beginning we thought...)* the corrosion resulted from the products used for spraying, but the kind of corrosion found and the areas in which it was found evidenced this corrosion originated from exposure to the environment and lack of maintenance and cleaning for years on the part of the owner.

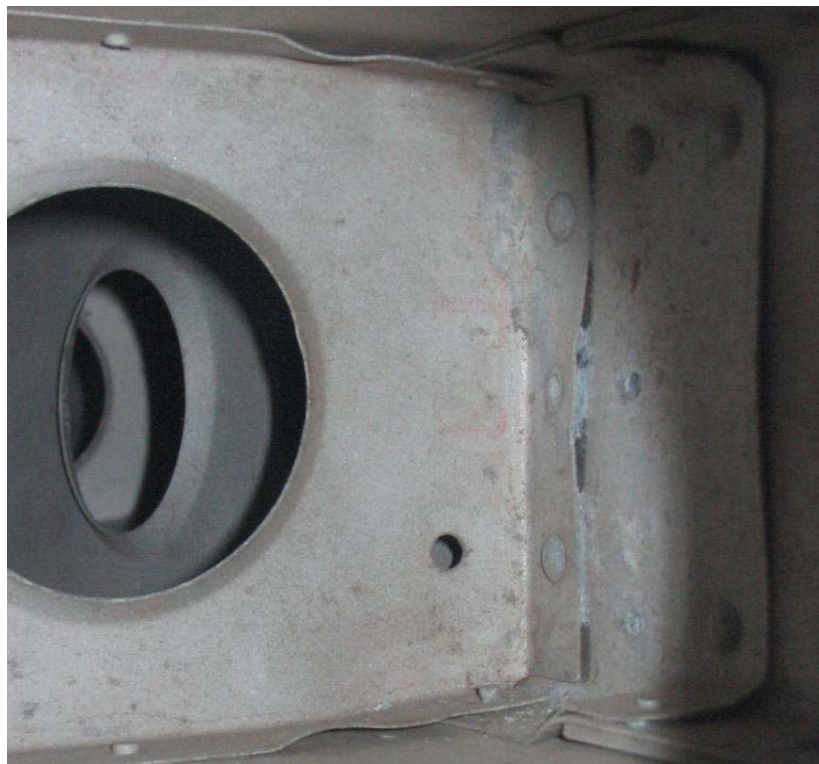
"At present, the aircraft is being maintained *(literally—the wing corrosion defects are being repaired. During this effort the vertical stabilizer was also removed and opened—more significant corrosion was found)*. I was there when these tasks were being performed and took pictures *(of these defects)*. As can be seen in the pictures, the corrosion found in the *(vertical stabilizer)* is of the same kind found in the *(wing)*. Some of these parts were really deteriorated—*(to the extent the rivets were broken off)*. These parts are made of 2024 T-3 Alclad aluminum and do not have any other corrosion protection measures—*apart from the clad*.

"After doing some research we have learned this kind of corrosion is frequent in these Cessna 100 series aircraft.... Given the aircraft fleet in our country has many aircraft which are older than 30 years, we are *(motivated)* to take preventative actions."

(Thank-you for the scary photographs! Corrosion detection, removal, prevention and repair for general aviation aircraft lies within the responsibility of the owner-operators, mechanics, and inspectors. Those of us who fly small Cessna aircraft pine for the days when new 150 series could occasionally be seen—even rented. All of us who participate in small aircraft operation need to be vigilant about corrosion—it's eating the last of our once-affordable airplanes into extinction: hence, light sport.)







Part(s) Total Time: (unknown).

Cessna: 421B; Malfunctioning Heater Fuel Pump; ATA 2140

“The pilot reported the heater had stopped during flight,” states this mechanic. “After returning to the maintenance shop the heater was troubleshot and inspected. We found the heater fuel pump had malfunctioned and had caught on fire for *(an undetermined)* time. We were able to say it was on fire because of the burn marks on the outside of the pump housing. I have enclosed 2 photographs to show this. *(One is shown below.)* I contacted C&D Associates to ask about this problem and I was told that they know about this and *(they)* have talked with the pump manufacturer Genuine Facet Corporation *(about designing)* a new style pump. C&D Associates Inc. says the problem is with the Parker Fuel Regulator in the wings on the Cessna 400 series. The regulators seem not to allow enough fuel to go through to keep the pumps operating correctly—allowing them to overheat and fail.” *(The picture has been compressed vertically.)*



Part Total Time: 53.0 hours.

PIPER**Piper: PA23-250; Broken Main Landing Gear Link Bolt; ATA 3213**

(This submission—and the one following—demonstrates reporting above and beyond the call. Mr. Dennis T. taped the subject parts—7/16 inch bolts and a piece of control cable—to the defect reports, placed the very heavy reports within a folded file folder, and the works into a large manila envelope—complete with \$1.98 postage. Besides expressing appreciation for such an effort—thank-you—the least this editor can do is to take it home, photograph it with my antique digital camera—then show it to the world.)

Mechanic Dennis T. writes, “P/N 402-427 bolt broke on landing. This bolt is in the *(landing gear link assembly)*, P/N 16240-5. The right main gear folded aft—the tire rode on the right flap.” *(A total cost of the damage in time, parts, and labor would be interesting as compared to a \$10 bolt replacement every 2,000 hours. What’s the cost if someone gets hurt next time? PA28 owner/operators--all such aircraft with similar scissors links—should look carefully at these pictures, and note the aircraft time. The SDRS data base reflects at least two additional/similar bolt failures.)*



(Yes...this editor is very much aware electronic SDRS submissions do not allow attachments, such as photographs. We are working to solve this problem.)

Part Total Time: 4,898.0 hours.

Piper: PA23-250; Broken Mixture Control Cable; ATA 7602

(Mr. Dennis T. from the above/previous heroic submission included yet more parts of his airplane.)

“The mixture cable (P/N 30205-08) broke at the control lever end. The seven strand inner cable parted $\frac{3}{4}$ inch from the push/pull slider cable end. Cable strands appear to have been ballooned from over compression/over travel. The cable parted at engine shut down. The replacement cable is P/N 454-204 and may have been improved over the original.” *(The SDRS data base records an additional two entries of mixture/cable problems.)*

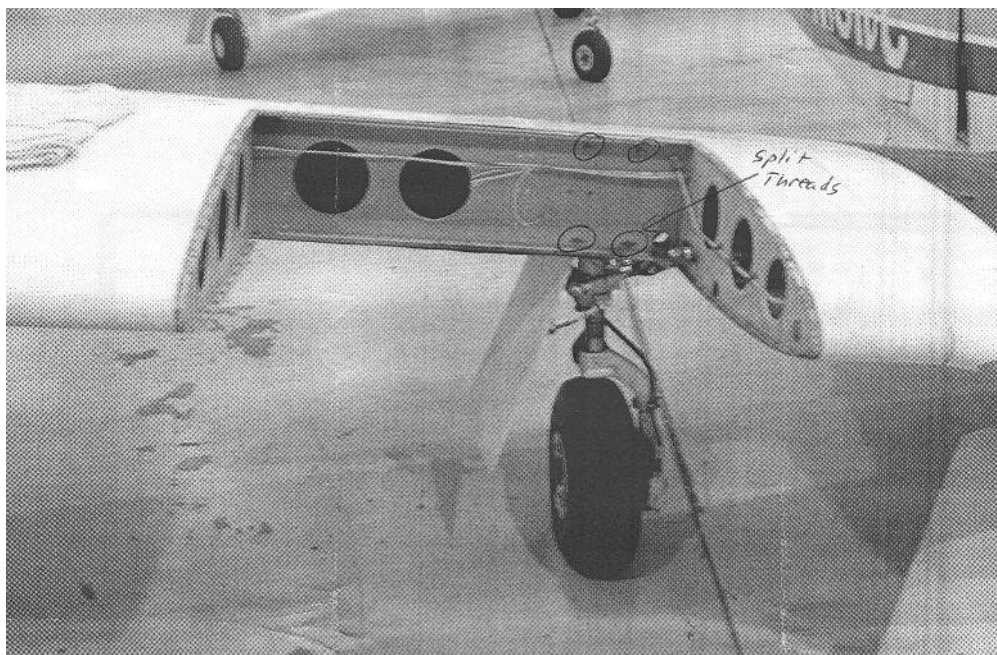




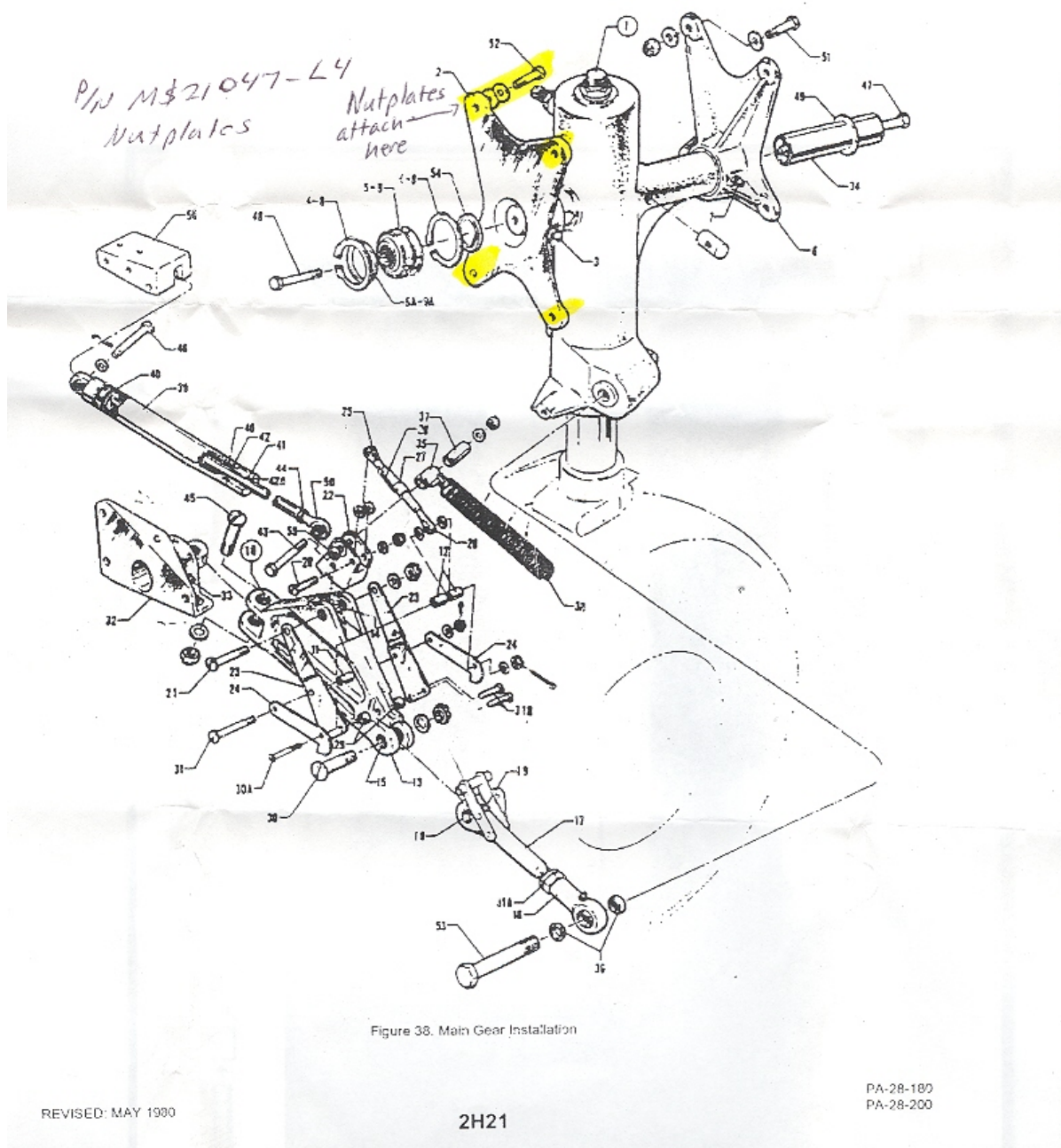
Part Total Time: 4,782.0 hours.

Piper: PA28R-200; Cracked Landing Gear Nutplates; ATA 3211

The submitting mechanic writes, "After removing the right fuel tank for repair, it was discovered all four nutplates holding the forward main landing gear trunnion bolts were cracked. The lower inboard nutplate (*P/N MS 21047-L4*) was cracked vertically down the threads. The remaining three nutplates were cracked in the rivet tabs. This aircraft is a training aircraft that sees its share of hard landings. Probable cause is fatigue from repeated (*hard*) landings. The left fuel tank was removed as well to inspect the left main landing gear trunnion nutplates. No cracks were found on the left side. Periodic inspections may be required to ensure the nutplates are serviceable." (*Good catch, Andrew! I suspect more than a few owners will specifically add this to their inspection list. However, the SDRS data base does not return additional/similar findings for landing gear nutplates—but if everybody is now looking for them....*)



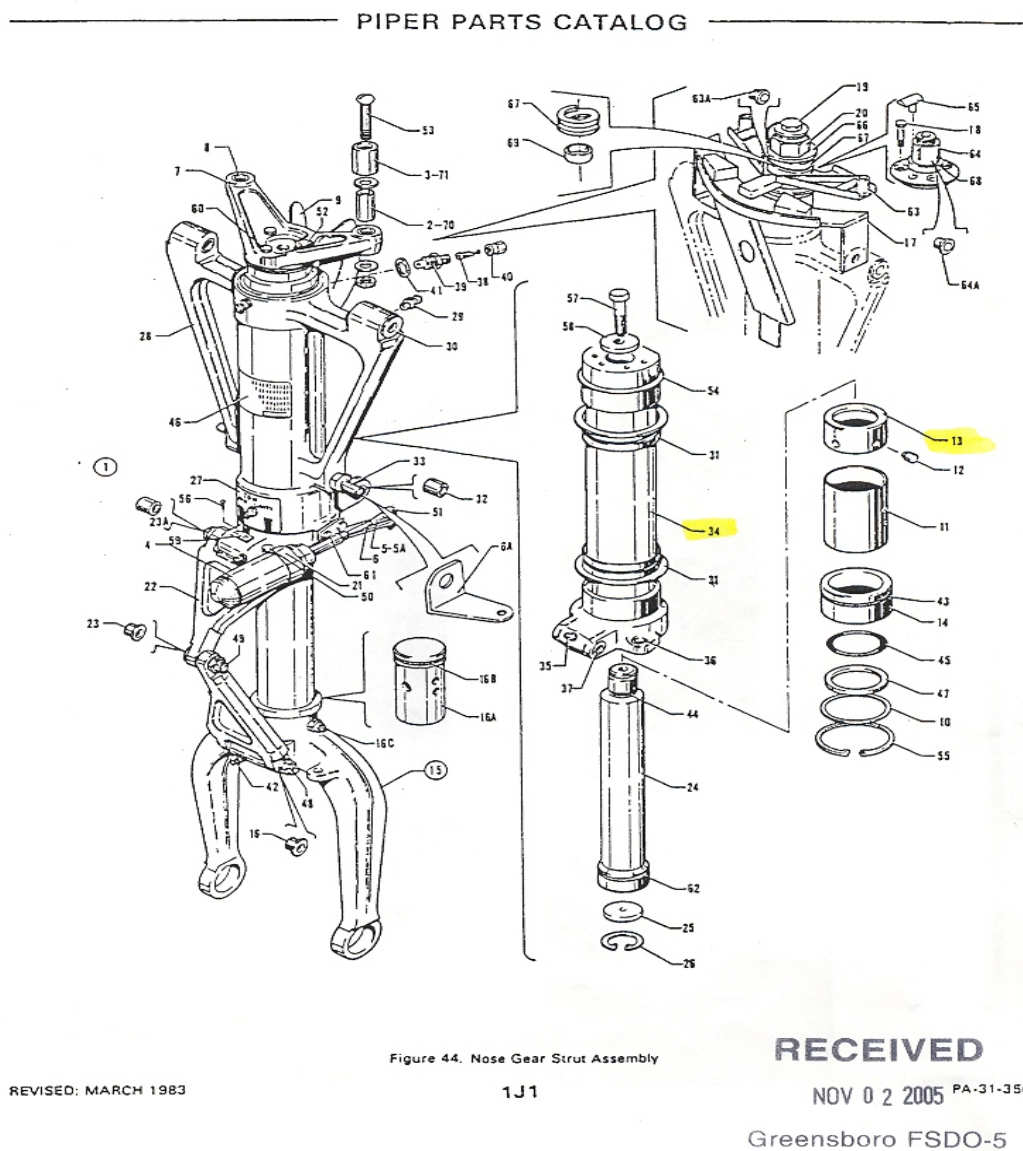
PIPER PARTS CATALOG



Part Total Time: (unknown).

Piper: PA31-350; Mis-bored Nose Gear Cylinders; ATA 3222

A mechanic states he (or his company) "...purchased two new nose landing gear cylinder assemblies with incorrectly machined center bores (P/N 45314-05). The bore of the cylinders are too small at the top which doesn't allow the upper bearings (P/N 751363) full travel to the top of the cylinder. This could cause the bearings to jam in the bore and the landing gear to malfunction upon retraction/extension."



Part Total Time: 0.0 hours.

RAYTHEON**Raytheon: 390 Premier 1; Fuel Drain Holes; ATA 5714**

(The following Special Airworthiness Information Bulletin (SAIB) is published as received from the Wichita Aircraft Certification Office. Contact information follows the discussion.)

**SPECIAL
AIRWORTHINESS
INFORMATION
BULLETIN**

Aircraft Certification Service
Washington, DC



U.S. Department
of Transportation

**Federal Aviation
Administration**

CE-XX-XX
February 22, 2006

www.faa.gov/certification/aircraft

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts you, owners and operators of **Raytheon Aircraft Company (RAC) Model 390 Premier 1 airplane** (serial numbers RB-4 through RB-101 and RB-103 through RB-123), of the need to inspect the main landing gear bay auxiliary bulkhead.

Background

An omission of fuel drain holes may exist on Model 390 airplanes, which could allow fuel vapors to collect in the event of a fuel leak in the main landing gear bay. The holes may have not been added during fabrication of the machined auxiliary bulkhead (P/N 390-110100). The fuel from a leaking fuel fitting or hose is collected in either the wing vapor box or main gear bay auxiliary bulkhead forward vapor box. The fuel is then intended to drain overboard through the omitted drain holes. As a result of our investigation, we suspect that the same condition may exist on other airplanes of the same type design.

Recommendation

Raytheon has released Service Bulletin (SB) 53-3726, which contains the procedures to inspect the main landing gear bay auxiliary bulkhead and to verify the presence of the drain holes. We recommend that you perform the actions in the SB.

For Further Information Contact

Anthony Flores, Aerospace Engineer, FAA Wichita Aircraft Certification Office, 1801 Airport Rd, Room 100, Wichita, Kansas, 67209, phone: (316) 946-4174, email: anthony.flores@faa.gov

For SB information, contact Raytheon Aircraft Company, 9709 E. Central, Wichita, Kansas 67201-0085; telephone: (800) 429-5372 or (316) 676-3140.

Part Total Time: (n/a)

Raytheon: 400A; Hydraulic Brake Line Chafe Damage; ATA 3240

This repair station technician writes, “During compliance with inspection portion of service bulletin 53-3511 (I) noted chafe damage to the hydraulic brake line (P/N 128-580101-1) from an adjacent floorboard attach screw. Damage found was less than 10 percent of the tubing wall thickness. (I) recommend this service bulletin be made at least a mandatory compliance item. Several of the effected aircraft inspected at this facility have shown evidence of damage in this area. However, since SB 53-3511 compliance is only recommended, many operators decline to comply with this inspection.”

Part Total Time: (unknown).

Raytheon: 400A; Failed Horizontal Trim; ATA 2797

A technician investigates the crew’s complaint of inoperative horizontal stabilizer trim and a “popped” circuit breaker that occurred while landing. “This crew reported ‘...normal trim operations *(are)* slow...’ just prior to *(the trim function’s)* failure. (I) found bare wiring in the copilot’s control wheel at the pitch trim switch. The wiring was repaired as required, *(with the return of normal horizontal trim operation)*. *(It is suggested)*...the wiring in this area have better strain relief/chafe protection.”

Part Total Time: (unknown).

Raytheon: 800XP; Failed Engine Start; ATA 8097

This technician receives a complaint that the aircraft “...starters were not rotating when the start sequence was initiated. *(Upon investigation I...)* found the wiring connectors loose on panel ZL: internal start contactor ‘U’ terminals (contactor P/N A84MAS). (I) re-torqued the wiring terminals. Engine start operations were normal.” *(This should be a fast check for other aircraft owners--hate to think about arcing potential at altitude. The same gentleman submitted the next report.)*

Part Total Time: (unknown).

Raytheon: 800XP; Failed Battery Power; ATA 2460

(This aircraft is the same as previously reported. Its technician is also the same.) “(I) investigated *(a complaint of)* battery power not connecting to the aircraft busses. (I) found the overhead panel battery power select switch (identifier ‘EN’) failed. (I) replaced the switch assembly (P/N 4TP1-10); battery power and engine start operations were normal.” *(Part time—even a “guesstimate”—would have been helpful here. ‘Three bucks’ says Andy has seen this—and the above problem—about a billion times and is therefore perfectly positioned to provide a bit more discussion as to why this switch failed—maybe how we could fix the problem. Make this your podium: lecture about what you know!)*

Part Total Time: (unknown).

HELICOPTERS

AGUSTA

Agusta: A109K2; Tail Rotor Trunnion Heat Damage; ATA 6420

(The following short entry completes a small but significant stack of similar entries describing the same redundant problem on the same type helicopter.)

A repair station mechanic writes, “During a 25 hour inspection, signs of heat (*over-temperature*) were noted. The enamel paint (*on the tail rotor trunnion*) was brown—discolored (*P/N 109-0131-05-115*).” (*SDRS records seven trunnion entries for this type helicopter. See last month’s Alerts for an excellent photograph of the trunnion. Followup on this item will be forthcoming and published when available.*)

Part Total Time: 509.3 hours.

EUROCOPTER

Eurocopter: EC130; Cracking Oil Vent Tube, ATA 7920

A mechanic for an air taxi operator writes, “The engine oil venting tube (*is*) an airframe manufacturer’s part. It is mounted on the engine with the venting orifice placed in the exhaust path and has an anti-rotation clamp welded to the stainless tube body. Cracks initiate in the spot welds, causing the clamp flange to crack A repair consisting of dressing off the flange remnants and installing a high temperature, fitted Adel clamp has been recommended by the aircraft manufacturer’s technical support engineering department. This repair has been applied fleet-wide on our EC130-B4 aircraft...with some success. However, a new development has occurred—several tubes now have cracks developing around the tube circumference, emanating from the clamp spot welds. These tubes have been removed and replaced with new parts whenever discovered. An undiscovered crack at this tube section could lead to a 10 inch long, 5/8 inch diameter piece of tube departing the aircraft, possibly striking the main rotor blades, the tail rotor blades, or the public on the ground. I recommend that new tubes—without welded clamps—be supplied by the aircraft manufacturer that are held with high temperature Adel clamps. (*Furthermore...*) all tubes welded, repaired, or of an un-welded design should be visually inspected--in detail--periodically for cracks.”

Part Total Time: 83.8 hours.

ACCESSORIES

LAMAR STARTER

Lamar (Starter): PM2401-H; Failed Pinion Gear; ATA 8011

(The following starter description occurs on a Cessna 172S aircraft with a Lycoming IO-360-L2A engine installed.)

“This starter pinion gear failed,” states the submitter. “Pieces of the gear jammed the starter motor and damaged the ring gear. This is the second occurrence of this incident on this aircraft. We also maintain another 172S that had this problem and same damage two times. I have spoken with Lamar about this and they mention there has been a problem in the past. In all cases (except this last one) teeth have broken off the ring gear. The current incident has only damaged the ring gear teeth.” (*The SDRS data base returns seven reports on the Lamar starter.*)

Part Total Time: 266.0 hours.

SHADIN FUEL TRANSDUCER

Shadin Fuel Transducer: Mount Bracket; Cracked Mount Bracket; ATA 7333

(This unit is reported on a Cessna U206F with a Continental IO)-520 under the cowl.)

The mechanic states, “During a 100 hour inspection, (*I*) found the mount for the Shadin fuel flow transducer cracked at the bend radii of all four mounting flanges.” (*This mount bracket P/N is 680510-1A. Sure sounds like a*

typical manufacturing defect of not deburring the edge before making the bend. It would have been “telling” if you had “guesstimated” the radius and “mic’d” the thickness of the metal: maybe 0.125 and 0.050? Or, is there more “suspension” with a 0.500 radius, etc.? Maybe next time...throw in those boring details. Nice catch by the mechanic—especially considering the part’s time! Now, everybody get mirrors and go check those mounts.)

Part Total Time: 280.0 hours.

AIR NOTES

ELECTRONIC VERSION OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT

One of the recent improvements to the Flight Standards Service Aviation Information Internet web site is the inclusion of FAA Form 8010-4, Malfunction or Defect Report. This web site is still under construction and further changes will be made; however, the site is now active, usable, and contains a great deal of information.

Various electronic versions of this form have been used in the past; however, this new electronic version is more user friendly and replaces all other versions. You can complete the form online and submit the information electronically. The form is used for all aircraft except certificated air carriers who are provided a different electronic form. The Internet address is: <http://av-info.faa.gov/sdrx>

When the page opens, select “M or D Submission Form” and, when complete, use the “Add Service Difficulty Report” button at the top left to send the form. Many of you have inquired about this service. It is now available, and we encourage everyone to use this format when submitting aviation, service-related information.

PAPER COPY OF FAA FORM 8010-4, MALFUNCTION OR DEFECT REPORT

In the past, the last two pages of the Alerts contained a paper copy of FAA Form 8010-4, Malfunction or Defect Report. To meet the requirements of *Section 508, this form will no longer be published in the Alerts; however, the form is available on the Internet at: <http://forms.faa.gov/forms/faa8010-4.pdf>. You can still download and complete the form as you have in the past.

*Section 508 was enacted to eliminate barriers in information technology, to make available new opportunities for people with disabilities, and to encourage development of technologies that will help achieve these goals.

INTERNET SERVICE DIFFICULTY REPORTING (iSDR) WEB SITE

The Federal Aviation Administration (FAA) Internet Service Difficulty Reporting (iSDR) web site is the front-end for the Service Difficulty Reporting System (SDRS) data base that is maintained by the Aviation Data Systems Branch, AFS-620, in Oklahoma City, Oklahoma. The iSDR web site supports the Flight Standards Service (AFS), Service Difficulty Program by providing the aviation community with a voluntary and electronic means to conveniently submit in-service reports of failures, malfunctions, or defects on aeronautical products. The objective of the Service Difficulty Program is to achieve prompt correction of conditions adversely affecting continued airworthiness of aeronautical products. To accomplish this, Mechanical Reliability Reports (MRRs), Malfunction or Defect Reports (M or Ds), or Service Difficulty Reports (SDRs) as they are commonly called, are collected, converted into a common SDR format, stored, and made available to the appropriate segments of the FAA, the aviation community, and the general public for review and analysis. SDR data is accessible through the “Query SDR data” feature on the iSDR web site at: <http://av-info.faa.gov/sdrx/>.

A report should be filed whenever a system, component, or part of an aircraft, powerplant, propeller, or appliance fails to function in a normal or usual manner. In addition, if a system, component, or part of an aircraft, powerplant, propeller, or appliance has a flaw or imperfection, which impairs or may impair its future function, it is considered defective and should be reported under the Service Difficulty Program.

The collection, collation, analysis of data, and the rapid dissemination of mechanical discrepancies, alerts, and trend information to the appropriate segments of the FAA and the aviation community provides an effective and economical method of ensuring future aviation safety.

The FAA analyzes SDR data for safety implications and reviews the data to identify possible trends that may not be apparent regionally or to individual operators. As a result, the FAA may disseminate safety information to a particular section of the aviation community. The FAA also may adopt new regulations or issue airworthiness directives (ADs) to address a specific problem.

The iSDR web site provides an electronic means for the general aviation community to voluntarily submit reports, and may serve as an alternative means for operators and air agencies to comply with the reporting requirements of 14 Title of the Code of Federal Regulations (CFR) Section 121.703, 125.409, 135.415, and 145.221, if accepted by their certificate-holding district office. FAA Aviation Safety Inspectors may also report service difficulty information when they conduct routine aircraft maintenance surveillance as well as accident and incident investigations.

The SDRS data base contains records dating back to 1974. At the current time, we are receiving approximately 40,000 records per year. Reports may be submitted to the iSDR web site on active data entry form or submitted hardcopy to the address below.

The SDRS and iSDR web site point of contact is:

John Jackson
Service Difficulty Reporting System, Program Manager
Aviation Data Systems Branch, AFS-620
P.O. Box 25082
Oklahoma City, OK 73125
Telephone: (405) 954-6486
SDRS Program Manager e-mail address: 9-AMC-SDR-ProgMgr@faa.gov

IF YOU WANT TO CONTACT US

We welcome your comments, suggestions, and questions. You may use any of the following means of communication to submit reports concerning aviation-related occurrences.

Editor: Daniel Roller (405) 954-3646
FAX: (405) 954-4570 or (405) 954-4655

E-mail address: Daniel.Roller@faa.gov

Mailing address: FAA, **ATTN: AFS-620 ALERTS**, P.O. Box 25082, Oklahoma City, OK 73125-5029

You can access current and back issues of this publication from the internet at:
<http://av-info.faa.gov/>. Select the General Aviation Airworthiness Alerts heading.

AVIATION SERVICE DIFFICULTY REPORTS

The following are abbreviated reports submitted for the previous month, which have been entered into the FAA Service Difficulty Reporting (SDR) System data base. This is not an all-inclusive listing of Service Difficulty Reports. For more information, contact the FAA, Regulatory Support Division, Aviation Data Systems Branch, AFS-620, located in Oklahoma City, Oklahoma. The mailing address is:

FAA

Aviation Data Systems Branch, AFS-620

PO Box 25082

Oklahoma City, OK 73125

To retrieve the complete report, click on the Control Number located in each report. These reports contain raw data that has not been edited. Also, because these reports contain raw data, the pages containing the raw data are not numbered.

If you require further detail please contact AFS-620 at the address above.

Federal Aviation Administration

Service Difficulty Report Data

Sorted by aircraft make and model then engine make and model. This report derives from unverified information submitted by the aviation community without FAA review for accuracy.

| Control Number | Aircraft Make | Engine Make | Component Make | Part Name | Part Condition |
|---|----------------|--------------|-----------------|-------------|----------------|
| Difficulty Date | Aircraft Model | Engine Model | Component Model | Part Number | Part Location |
| 2006FA0000325 | | | | SEAT FRAME | BROKEN |
| 3/14/2006 | | | | 71513 | |
| THE LOWER SEAT FRAME CONSISTS OF A PERIMETER RECTANGULAR TUBE FRAME THAT HAS THE ENDS OF STEEL STRAPS WELDED TO IT TO FORM A LOOSE WEBBING ASSEMBLY WHICH SUPPORTS THE SEAT CUSHION. DURING A PREFLIGHT THE PILOT NOTICED THE SEAT SAGGING AND FOUND THE ENDS OF TWO STRAPS HAD BROKEN WELDS. | | | | | |
| 2006FA0000294 | | CONT | | CYLINDER | CRACKED |
| 8/22/2005 | | IO520F | | TISN712ACA | ENGINE |
| 5 OF 6 CYLINDERS CRACKED AT 670 HOURS. (S/N 12094-7, 1220827, 13248-8, 13890-9, 13890-25, 14841-10) (K) | | | | | |
| 2006FA0000293 | | CONT | | CYLINDER | CRACKED |
| 8/22/2005 | | IO520F | | TISN712ACA | ENGINE |
| 6 OF 6 CYLINDERS CRACKED AT 670 HOURS. (S/N 12094-7, 12208-27, 13248-8, 13890-9, 13890-25, 14841-10) (K) | | | | | |
| 2006FA0000295 | | CONT | | CYLINDER | CRACKED |
| 8/22/2005 | | IO520F | | TISN712ACA | ENGINE |
| CYLINDER CRACKED AT 670 HOURS. (K) | | | | | |
| 2006FA0000296 | | CONT | | CYLINDER | CRACKED |
| 8/22/2005 | | IO520F | | TISN712ACA | ENGINE |
| CYLINDER CRACKED AT 670 HOURS. (K) | | | | | |
| 2006FA0000297 | | CONT | | CYLINDER | CRACKED |
| 8/22/2005 | | IO520F | | TISN712ACA | ENGINE |
| CYLINDERS CRACKED AT 670 HOURS. (K) | | | | | |
| 2006FA0000298 | | CONT | | CYLINDER | CRACKED |
| 8/22/2005 | | IO520F | | TISN712ACA | ENGINE |
| CYLINDERS CRACKED AT 670 HOURS. (K) | | | | | |
| 2006FA0000292 | | CONT | | CYLINDER | CRACKED |
| 8/22/2005 | | IO520F | | 934215 | ENGINE |
| CYLINDER CRACKED AT 480 HOURS. (K) | | | | | |
| 2006FA0000287 | | CONT | | CYLINDER | CRACKED |
| 8/22/2005 | | TSIO520M | | TIST712BCA | ENGINE |
| 5 OF 6 CYLINDERS CRACKED: (SN 11501-23, 11501-11, 11556-01, 10644-18 CRACKED EXHAUST SIDE) (11909-27 CRACKED INTAKE SIDE) AT 439.5 HOURS. (K) | | | | | |
| 2006FA0000289 | | CONT | | CYLINDER | CRACKED |

| | | | |
|---|-------------|------------|------------------|
| 8/22/2005 | TSIO520M | TIST712BCA | ENGINE |
| 5 OF 6 CYLINDERS CRACKED. (SN NR 11501-23, 11501-11, 11556-01, 10644-18, 11909-27 CRACKED EXHAUST SIDE) (SN NR 11909-27 CRACKED INTAKESIDE) CRACKED AT 439.5 HOURS. (K) | | | |
| 2006FA0000288 | CONT | CYLINDER | CRACKED |
| 8/22/2005 | TSIO520M | TIST712BCA | ENGINE |
| 5 OF 6 CYLINDERS CRACKED, (SN NR 11501-23, 11501-11, 11556-01, 10644-18 CRACKED EXHAUST SIDE) (SN NR 11901-27 CRACKED INTAKE SIDE) CRACKED AT 439.5 HOURS. (K) | | | |
| 2006FA0000290 | CONT | CYLINDER | CRACKED |
| 8/22/2005 | TSIO520M | TIST712BCA | ENGINE |
| 5 OF 6 CYLINDERS CRACKED. (S/N 11501-23, 11501-11, 11556-01, 10644-18 CRACKED AT EXHAUST SIDE) (S/N 11909-27 CRACKED AT INTAKE SIDE) CRACKED AT 439.5 HOURS. (K) | | | |
| 2006FA0000291 | CONT | CYLINDER | CRACKED |
| 8/22/2005 | TSIO520M | TIST712BCA | ENGINE |
| 5 OF 6 CYLINDERS CRACKED (S/N 11501-23, 11501-11, 11556-01, 10644-18 CRACKED EXHAUST SIDE) (S/N 11909-27 CRACKED ON INTAKE SIDE) CRACKED AT 439.5 HOURS. (K) | | | |
| 2006FA0000330 | WILINT | STATOR | DETERIORATED |
| 4/10/2006 | FJ44 | 59084 | COMPRESSOR |
| 3RD STAGE IP STATOR ABRADABLE WAS EXFOLIATING CAUSING THE 3RD STAGE IP BLADES TO CONTACT THE STATOR ABRADABLE. THIS RESULT IN N1 LOCK-UP. BASED UPON HARDWARE EVALUATION, ROOT CAUSE OF THE ABRADABLE EXFOLIATING WAS DUE TO THE WATER WASH PROCEDURES (COASTAL A/C) NOT BEING FOLLOWED PG THE ENGINE MM. (K) | | | |
| ASWFSDO15OKC | AMTR | ACTUATOR | WORN |
| 2/7/2006 | GLASAIRIII | | NLG |
| THE PILOT STATED THAT DURING ROLLOUT AFTER LANDING A HOME BUILT GLASAIR III HE APPLIED THE BRAKES AND THE NOSE GEAR COLLAPSED. THE PILOT SAID THE LANDING GEAR POSITION INDICATOR LIGHTS WERE GREEN PRIOR TO LANDING. THE NOSE GEAR ACTUATOR WAS FOUND TO BE LEAKING FLUID. DURING DISASSEMBLY OF THE ACTUATOR THE PISTON SEAL WAS FOUND TORN. THE AIRCRAFT OWNER SUSPECTS THAT HYDRAULIC FLUID WAS BY PASSING THE PISTON DURING OPERATION BECAUSE OF THE TORN SEAL. THE ACTUATOR DID NOT PRODUCE ENOUGH FORCE TO OVERCOME THE AIR LOAD ON THE NOSE GEAR TO LOCK THE NOSE GEAR DOWN. THIS IS THE SUBJECT OF STODDARD-HAMILTON SERVICE BULLETIN 136. | | | |
| 2006FA0000343 | AMTR | CONT | POINTS |
| 4/1/2006 | LC41550FG | TSIO550C | M3081 |
| ON ENGINE GROUND RUN PRIOR TO FLIGHT MAGNETO CHECK FOUND RT MAGNETO HAD FAILED INSPECTION FOUND POINTS BROKEN PICTURE INCLOSED. (K) | | | |
| 2006FA0000377 | AMTR | ROTAX | ATTACH FITTING |
| 3/27/2006 | ZENITHCH701 | ROTAX912 | ELEVATOR HINGE |
| DURING CONDITION INSPECTION IT WAS DISCOVERED THAT THE RT ELEVATOR HINGE ATTACH SUPPORT HAD A CRACK IN THE T/E RADIUS THAT WAS STOP DRILLED. A DOUBLER REPAIR WAS INSTALLED. THE ELEVATOR HORN ATTACH ALSO HAD A LOOSE RIVET. THIS WAS REPAIRED BY INSTALLING AN HARDWARE. CLOSE ATTENTION SHOULD BE PAID TO THESE AREA EVEN ON PREFLIGHT AS THIS IS THE THIRD KNOWN INCIDENCE OF THIS KIND IN THE AREA. (K) | | | |
| 2006FA0000384 | BEECH | BOLT | MISDRILLED |
| 3/27/2006 | 300BEECH | 101810151 | RT GEAR DRAG LEG |
| THIS IS AN ALEMITE TYPE BOLT. IT WAS FOUND THAT GREASE WAS NOT GETTING TO THE BUSHINGS ON THE FAR END OF THE BOLT. UPON EXAMINATION, IT WAS FOUND THAT THE CENTER GREASE PORT IN THE BOLT WAS NOT | | | |

DRILLED FAR ENOUGH TO ALLOW GREASE TO GET TO THE FINAL SIDE-DRILLED PORT. THUS THE BUSHING FOR THAT PORT WAS NOT GETTING LUBRICATION. DRAG LINKS WITH THIS PN BOLT SHOULD BE CHECKED FOR PROPER LUBRICATION. (K)

| | | | | |
|---|----------|------|------------|--------|
| 2006FA0000208 | BEECH | PWA | COVER | CHAFED |
| 2/21/2006 | 300BEECH | PT6* | 1019800387 | WINGS |
| COVER IS CHAFING LWR FWD LT AND RT WING ATTACH POINT SPAR CAP AND WING SKIN. THE COVER HAS NO ANTI-CHAFE PROTECTION. RECOMMEND RUBBER EDGE SEAL OR FAY SEAL EDGE TO AVOID METAL TO METAL CONTACT WITH SPAR WING SKIN. (K) | | | | |

| | | | | |
|--|----------|---------|------------|--------|
| 2006FA0000206 | BEECH | PWA | COVER | CHAFED |
| 2/21/2006 | 300BEECH | PT6A60A | 1019800387 | WINGS |
| COVER IS CHAFING LOWER FWD LT AND RT WING ATTACH POINT, SPAR CAP AND WING SKIN. THE COVER HAS NO ANTI-CHAFE PROTECTION. RECOMMEND RUBBER EDGE SEAL OR FAY SEAL EDGE TO AVOID METAL TO METAL CONTACT WITH SPAR AND WING SKIN. (K) | | | | |

| | | | | |
|--|----------|---------|------------|--------|
| 2006FA0000205 | BEECH | PWA | COVER | CHAFED |
| 2/21/2006 | 300BEECH | PT6A60A | 1019800388 | WINGS |
| COVER IS CHAFING LOWER FWD LT AND RT WING ATTACH POINT, SPAR CAP AND WING SKIN. THE COVER HAS NO ANTI-CHAFE PROTECTION. RECOMMEND RUBBER EDGE SEAL OR FAY SEALED EDGE TO AVOID METAL TO METAL CONTACT WITH SPAR AND WING SKIN. (K) | | | | |

| | | | | |
|---|-------|--|-------------|------------|
| OMKR200600001 | BEECH | | RIB | CRACKED |
| 4/25/2005 | 400A | | 45A21104642 | HORIZ STAB |
| ROLLER RIB AT INBOARD END CRACKED (ASSY P/N 45A21104-642) IN THREE PLACES. RIB, AND BOTH CLIPS. CRACKING IS FROM RIB MATERIAL BEING TOO THIN, IMPROPER RIGGING, OR EXCESSIVE WEAR OF HORIZONTAL STABILIZER HINGE POINTS. SUSPECT RIB MATERIAL IS JUST TOO THIN TO CARRY LOAD FROM ROLLER BRACKET. | | | | |

| | | | | |
|---|-------|--------|-----------|--------------|
| 2006FA0000375 | BEECH | PWA | CONNECTOR | WRONG PART |
| 4/3/2006 | 400A | JT15D5 | | WIRE HARNESS |
| DURING SCHEDULED INSPECTION FOUND SEVERAL INCORRECT TYPE SPLICE CONNECTORS AND REPAIRS IN CABIN COLD CATHODE LIGHTING WIRING. HAVE FOUND THIS TO BE THE APPARENT CAUSE OF MINOR FIRES AND OVERHEATING ABOVE THE HEADLINER IN SEVERAL AIRCRAFT PREVIOUSLY.. SEVERAL COMMUNIQUE'S HAVE NOTED THIS SUBJECT PREVIOUSLY. SUGGEST A MANDATORY SB OR SAFETY COMMUNIQUE BE ISSUED FOR A ONE TIME INSPECTION OF COLD CATHODE WIRING FOR NON-APPROVED CONNECTORS AND WIRING REPAIRS. WARNINGS AND SPECIFIC REPAIR INSTRUCTIONS SHOULD BE ADDED TO THE MM. (K) | | | | |

| | | | | |
|---|-------|--|---------|---------|
| 2006FA0000360 | BEECH | | SPINNER | CRACKED |
| 3/14/2006 | 58 | | D78115P | ENGINE |
| SPINNER HAS CRACKS IN 3 PLACES NEAR SCREW HOLES ADJACENT TO PROPELLER BLADES. (K) | | | | |

| | | | | | |
|--|-------|--------|------|--------|---------|
| 2006FA0000307 | BEECH | CONT | CONT | ENGINE | UNKNOWN |
| 2/8/2006 | 58 | IO550C | | | RT WING |
| RT ENGINE WAS STARTED AND PILOT NOTICED LOW OIL PRESSURE. INSTALLED ANOTHER GAUGE IN LINE TO VERIFY PROBLEM RAN ENGINE, OIL PRESSURE CERTIFIED LOW. CHANGED OIL AND INSPECTED FILTER. FOUND NO OBVIOUS PROBLEMS, STARTED ENGINE, HAD NO OIL PRESSURE, PULLED RELIEF VALVE. DETERMINED THAT SOMETHING INSIDE THE ENGINE WAS COMING APART. REMOVED ENGINE TO SEND BACK TO ENGINE OVERHAULER. (K) | | | | | |

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|--|-------|--------|----------|-----------------|
| 2006FA0000265 | BEECH | CONT | BAFFLE | DETERIORATED |
| 3/1/2006 | 95B55 | IO470* | PMA20332 | WING FUEL CELLS |
| FOUND FUEL SYSTEM CONTAMINATED WITH AN UNKNOWN SUBSTANCE. AFTER HAVE THE ENTIRE SYSTEM DRAINED, FLUSHED AND THE ENGINE FUEL INJECTION SYSTEM OVERHAULED, THE AIRCRAFT WAS REFUELED AND FLOWN. AFTER A SHORT FLIGHT, THE SUMPS WERE CHECKED AGAIN AND THE SUBSTANCE WAS FOUND | | | | |

AGAIN. BOTH FORWARD FUEL CELLS WERE REMOVED FROM THE AIRCRAFT. THE SPONGE-LIKE MATERIAL INSIDE THE WING ROOT HEADER TANK PORTION OF THE FUEL CELL WAS FOUND IN A DETERIORATED CONDITION AND CONTAMINATING THE ENTIRE FUEL SYSTEM. NEW FUEL CELLS WERE ORDER. (K)

| | | | | |
|-------------------------------|-------|--------|-----------|--------------|
| 2006FA0000262 | BEECH | CONT | FUEL CELL | DETERIORATED |
| 3/1/2006 | 95B55 | IO470* | PMA20331 | LT, RT WINGS |

FOUND FUEL SYTEM CONTAMINATED WITH AN UNKNOWN SUBSTANCE. AFTER HAVING THE ENTIRE SYSTEM DRAINED, FLUSHED AND THE ENGINE FUEL INJECTION SYSTEM OVERHAULED, THE AIRCRAFT WAS REFUELED AND FLOWN. AFTER A SHORT FLIGHT, THE SUMPS WERE CHECKED AGAIN AND THE SUBSTANCE WAS FOUND AGAIN. BOTH FORWARD FUEL CELLS WERE REMOVED FROM THE AIRCRAFT. THE SPONGE-LIKE MATERIAL INSIDE THE WING ROOT HEADER TANK PORTION OF THE FUEL CELL WAS FOUND IN A DETERIORATED CONDITION AND CONTAMINATING THE ENTIRE FUEL SYSTEM. NEW FUEL CELLS WERE ORDERED. (K)

| | | | | |
|-------------------------------|-------|--------|------------------|---------|
| 2006FA0000327 | BEECH | CONT | IMPULSE COUPLING | RUSTED |
| 3/13/2006 | 95B55 | IO470L | | MAGNETO |

DURING A ROUTINE INSP, ALL MAGNETOS WERE REMOVED FOR POINTS AND CONDENSER REPLACEMENT. RUST WAS FOUND ON THE FLYWEIGHT/AXLE AREA OF THE IMPULSE COUPLING. A WEAR CHECK WAS MADE AND IT WAS DETERMINED THAT ALL COUPLINGS FAILED IAW MSB. NOTE: THE FLYWEIGHT/ AXLE PIN WEAR IS IN EXCESS OF .014 AND MAY BE DUE TO RUST. THIS AREA OF INSPECTION MAY BE OVERLOOKED DUE TO THE OMISSION OF MANY IMPULSE COUPLINGS INSTALLED ON ENGINE NOT INCLUDED IN AD. (K)

| | | | | |
|-------------------------------|-------|--------|---------|------------------|
| 2006FA0000340 | BEECH | CONT | WIRE | CHAFED |
| 2/10/2006 | A36 | IO550B | L143J20 | RT WING NAV LITE |

PILOT REPORTED NAVIGATION LIGHT BREAKER SWITCH (POPPED) IN FLIGHT AND WAS NOT ABLE TO RESET. MAINTENANCE PERSONAL TROUBLESHOT NAVIGATION LIGHT SYSTEM AND FOUND A SHORT IN THE WIRING IN THE RT WING AT APPROXIMATE WING STATION 162.5. A NEW WIRE WAS PULLED THROUGH TO REPLACE THE OLD WIRE. TIME IN SERVICE IS A FACTOR IN THIS OCCURRENCE. ALSO IN SERVICE IS A FACTOR IN THIS OCCURRENCE. ALSO THE WIRE LAYS IN A STRINGER CHANNEL AND HAS NO OTHER MEANS OF SUPPORT OTHER THAN GLUED IN STRIPS AT VARIOUS INTERVALS TO KEEP THE WIRE IN THE CHANNEL. THERE IS NO ACCESS TO THIS WIRE FROM WING STA 122.75 TO 191.00. THERE SHOULD BE A PLASTIC CONDUIT TUBING FOR THIS WIRE TO RUN THROUGH. (K)

| | | | | |
|-------------------------------|-------|--|-------------|-----------|
| 2006FA0000356 | BEECH | | DUCT | CRACKED |
| 3/13/2006 | B200 | | 10191000495 | LT ENGINE |

LT ENGINE LOWER AFT COWLING, LWR DUCT FOUND CRACKED ABOUT 80 PERCENT ITS ENTIRE WIDTH ALONG FIRST RIVET ROW. REMOVED CRACKED DUCT AND FOUND NOT TO BE ROLLED ENOUGH. THIS PUT STRESS ON RIVET ROW. NEW SPARE PART ORDER FROM MFG WAS ROLLED CORRECTLY AND FIT WITHOUT STRESS. (K)

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|-------------------------------|-------|------|-------------|---------|
| 2006FA0000376 | BEECH | PWA | WINDSHIELD | CRACKED |
| 3/30/2006 | B300 | PT6* | 10138402518 | COCKPIT |

FLIGHT CREW REPORTED CO-PILOTS WINDSHIELD RAPIDLY FAILED IN CRUISE FLIGHT, INNER LAYER (SPIDER WEBBED) OVER ENTIRE INTERIOR SURFACE. DELAMINATIONS NOTED SPREADING FROM BOTH IB CORNERS UPON REMOVAL. TECH INSTALLING REPLACEMENT WINDSHIELD NOTED PREVIOUS INSTALLATION MAY HAVE HAD SEALS INSTALLED INCORRECTLY, CAUSING INCREASED STRESS ON WINDSHIELD ASSY. RECOMMEND TECH INSTALLING REPLACEMENT WINDSHIELDS REVIEW CURRENT STRESS FREE INSTALL KIT INSTRUCTIONS AND MM INSTALL PROCEDURES CAREFULLY PRIOR TO INSTALLATION. (K)

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|-------------------------------|-------|---------|----------|--------|
| 2006FA0000346 | BEECH | CONT | PUMP | WORN |
| 3/20/2006 | F33A | IO520BB | 1U478003 | ENGINE |

PILOT REPORTED THAT AT 1700 RPM INSTRUMENT AIR PRESSURE (3.5 HG) UPON TROUBLESHOOTING OF THE INSTRUMENT AIR PRESSURE SYSTEM TECHNICIAN FOUND AIR PUMP WAS NOT PRODUCING ENOUGH PRESSURE. PROBABLE CAUSE IS UNKNOWN AT THIS TIME. NO RECOMMENDATION AT THIS TIME EITHER. (K)

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|-----------------------------|--------|--|------|--------|
| DU4R2006355 | BOEING | | SKIN | DENTED |
|-----------------------------|--------|--|------|--------|

| | | | |
|---|--------|--------------|-----------------------|
| 3/31/2006 | 727223 | | BS 1137 S20L |
| FUSELAGE SKIN BELOW NR 1 ENGINE DENTED AT LAP SEAM BS 1137 S-20L. CUT OUT DENTED AREA. FABRICATED AND INSTALLED EXTERNAL REPAIR 7.75" X 9.25" X 5.75" X 2.5" FROM 20240-T3 .063 AND LAP SPLICE REPAIR 10" X 4.25" X 4.5" X 2.75" X 4.5" FROM 2024-T3 .050 IAW B727 SRM 53-30-3 FIG. 5, 51-10-3. | | | |
| DU4R2006346 | BOEING | STRUCTURE | CORRODED |
| 3/26/2006 | 727223 | | BS 1166 |
| RT AFT LAV SUB FLOOR HAS CORROSION IN SEVERAL PLACES AT BS 1166. CUT OUT CORROSION. FABRICATED AND INSTALLED WEB REPAIR 15-3/4" X 4-3/4" FROM 2024-T3 .071 IAW B727 SRM 51-40-2, 51-30-2, 51-10-2 AND AMM 51-20-23. | | | |
| DU4R2006344 | BOEING | SKIN | DENTED |
| 3/20/2006 | 727223 | | BS 1145 |
| FUSELAGE SKIN DENTED AT BS 1145 BETWEEN S18-19L. FABRICATED AND INSTALLED REPAIR DOUBLER 10-3/4" X 9" FROM 2024-T3 .063 IAW B727 SRM 53-30-3 AND 51-30-2. CLASS "A" REPAIR. | | | |
| DU4R2006347 | BOEING | SEAT TRACK | CORRODED |
| 3/26/2006 | 727223 | 656426110 | BS1120-1133 |
| CORROSION ON LT O/B SEAT TRACK BS 1100-1133. REMOVED CORRODED SEAT TRACK FROM BS 1070 TO BS 1137 AND REPLACED IAW B727 SRM 51-30-2, 51-10-2 AND AMM 51-20-23. | | | |
| DU4R2006345 | BOEING | FLOORBEAM | CRACKED |
| 3/22/2006 | 727223 | 65255896 | BS 760 RBL 1 |
| CRACK IN CABIN FLOOR SUPPORT BS 760 RBL 1. REMOVED AND REPLACED FLOOR SUPPORT WITH IAW B727 SRM 51-30-2 AND 51-30-5. | | | |
| DU4R2006342 | BOEING | SKIN | DENTED |
| 3/13/2006 | 727223 | | BS 1074 S18-19L |
| FUSELAGE SKIN DENTED AT BS 1074 BETWEEN S-18L - 19L. CUT OUT DENTED AREA IAW B727 SRM 53-30-2 FIG. 1 HFEC AROUND CUT OUT PER D6-48875, PT 6, 51-10-00 FIG. 23. NO RELEVANT INDICATION NOTED. FABRICATED AND INSTALLED REPAIR DOUBLER 12" X 11.7" X 7.55" FROM 2024-T3 .063 IAW B727 SRM 51-30-3 FIG. 1, 51-10-2, 51-30-2, 53-30-3 CLASS "A" REPAIR. | | | |
| DU4R2006343 | BOEING | SKIN | DENTED |
| 3/13/2006 | 727223 | | BS 1079 |
| FUSELAGE SKIN DENTED AT BS 1079 BETWEEN S-13-14L. CUT OUT DENTED AREA IAW B727 SRM 53-30-3 FIG. 13A. FABRICATED AND INSTALLED REPAIR DOUBLER 5.80 DIAMETER FROM 2024-T3 .090 IAW B727 SRM 51-10-2 PG. 7, AMM 51-20-23 PG. 704. CLASS "A" REPAIR. | | | |
| 2006FA0000269 | BOEING | SMITHSIND | COVER |
| 2/15/2006 | 737* | 123412 | CRACKED SHUTOFF VALVE |
| (REF NR: 204244/PH3) COVERED CRACKED. PROBABLE CAUSE: FATIGUE. REDESIGN COVER. (K) | | | |
| 2006FA0000272 | BOEING | PNEUDRAULICS | HOUSING |
| 2/13/2006 | 737* | 511531 | CRACKED LANDING GEAR |
| (204174/PH3) HOUSING CRACKED IN THE BORE OF THE MOUNTING LUG. PROBABLE CAUSE: FATIGUE. REDESIGN HOUSING. (K) | | | |
| 2006FA0000270 | BOEING | SMITHSIND | COVER |
| 2/15/2006 | 737* | 123412 | CRACKED HYD SYS |
| (REF NR: 204200/PH3) COVER CRACKED, PROBABLE CAUSE, FATIGUE. REDESIGN COVER. (K) | | | |
| 2006FA0000216 | BOEING | HOUSING | SPLIT |

| | | | |
|-----------|------|-----------|------------------|
| 2/28/2006 | 737* | 656952211 | SPOILER ACTUATOR |
|-----------|------|-----------|------------------|

HOUSING RECEIVED SPLIT OPEN IN A RADIAL DIRECTION NEAR LARGE ID, CAUSING TOTAL FAILURE OF ASSY, CAUSE UNKNOWN. (K)

| | | | |
|-------------------------------|--------|----------|-----|
| 2006FA0000350 | BOEING | BALL END | FOD |
|-------------------------------|--------|----------|-----|

| | | | |
|-----------|------|-------------|------------------|
| 3/21/2006 | 737* | 07322P11070 | HORIZ STABILIZER |
|-----------|------|-------------|------------------|

THE MAJOR COMPONENTS ARE BEYOND ECONOMICAL REPAIR (SCRAP). THE DAMAGE WAS CAUSED BY A FOREIGN OBJECT, PROBABLY LOOSE BALL. THIS CAN HAPPEN ANYTIME THE BALLNUT ASSY IS REMOVED FROM THE SCREWSHAFT. (K)

| | | | |
|-------------------------------|--------|------------|-----|
| 2006FA0000358 | BOEING | BALL SCREW | FOD |
|-------------------------------|--------|------------|-----|

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|-----------|------|-------------|------------|
| 3/21/2006 | 737* | 07322P11070 | STABILIZER |
|-----------|------|-------------|------------|

FOREIGN OBJECT DAMAGE DISCOVERED DURING INSPECTION OF BALLSCREW ASSY BY SUBCONTRACTOR. THE MAJOR COMPONENTS ARE BEYOND ECONOMIC REPAIR (SCRAP). THE DAMAGE WAS CAUSED BY A FOREIGN OBJECT, PROBABLY LOOSE BALL. THIS CAN HAPPEN ANYTIME THE BALLNUT ASSY IS REMOVED FROM THE SCREWSHAFT. (K)

| | | | |
|-------------------------------|--------|------|------------|
| 2006FA0000341 | BOEING | FLAP | WRONG PART |
|-------------------------------|--------|------|------------|

| | | | |
|----------|--------|------------|-------|
| 6/3/2005 | 7373G7 | 6546434139 | WINGS |
|----------|--------|------------|-------|

(ATC0660) DURING ROUTINE MAINTENANCE IT WAS NOTICED THAT THE LT IB AFT FLAP APPEARED TO BE OF THE WRONG TYPE FOR THIS SERIAL OF AIRCRAFT. THE AIRCRAFT IPC WAS CONSULTED AND THIS CONFIRMED THAT TIME 139, AFT FLAP ASSY IS NOT EFFECTIVE FOR THIS AIRCRAFT. A SURVEY WAS CARRIED OUT ON THE OTMGR T/E FLAP ASSEMBLED AND IT WAS DISCOVERED THAT THE RT IB AFT FLAP WAS ALSO NOT OF THE CORRECT AFFECTIVITY. FOR THIS AIRCRAFT (-140). ALL OF THE OTHER FLAP ASSEMBLED WERE FOUND TO BE CORRECT. WE SUSPECT THAT THESE AFT FLAP ASSEMBLIES ARE FOR AIRCRAFT. (K)

| | | | | |
|-------------------------------|--------|----|-------|-----------|
| 2006FA0000342 | BOEING | GE | CABLE | MISROUTED |
|-------------------------------|--------|----|-------|-----------|

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|-----------|--------|----------|---------------|------------|
| 3/15/2006 | 7373G7 | CFM563B1 | 417N31002933E | PX OXY SYS |
|-----------|--------|----------|---------------|------------|

(REF: ATC0662) THE ACTUATING CABLE TO THE CHEMICAL OXYGEN GENERATORS ON PASSENGER SERVICE UNITS WERE FOUND INCORRECTLY ROUTED. IE: IT WAS UNDER THE PIN AND RESTING ON THE PLASTIC MOULDING. DEFECT RAISED AS AN (IORS) INTERNAL OCCURRENCIES REPORT AND UPGRADED TO MALFUNCTION AND DEFECT REPORT DUE TO SYSTEM BEING (EMERGENCY). (K)

| | | | |
|-------------------------------|--------|-----------|------------|
| AMTA200600279 | BOEING | FUEL TANK | READS HIGH |
|-------------------------------|--------|-----------|------------|

| | | | |
|-----------|--------|--|------|
| 4/14/2006 | 73783N | | WING |
|-----------|--------|--|------|

RT MAIN FUEL TANK READ 400 LBS HIGH. FQIS TEST SHOWS NO FAULT FOR RT MAIN TANK. CHECK GOOD, C/W FIM 28-41-00-810. (K)

| | | | | |
|-------------------------------|--------|--------|---------|---------|
| 2006FA0000271 | BOEING | BOEING | HOUSING | CRACKED |
|-------------------------------|--------|--------|---------|---------|

| | | | |
|-----------|------|-----------|---------------|
| 2/13/2006 | 767* | 271T00714 | HYDRAULIC SYS |
|-----------|------|-----------|---------------|

(203230/FXS) HOUSING CRACK AT THE PRESSURE (INLET) PORT FOR THE CHECK VALVE BORE. PROBABLE CAUSE: FATIGUE. REDESIGN HOUSING. (K)

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|-------------------------------|--------|--------|---------|
| 2006FA0000322 | BOMBDR | FAUCET | UNKNOWN |
|-------------------------------|--------|--------|---------|

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| 9/26/2005 | BD7001A10 | | |
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THE FOWARD FAUCET WAS BUMPED OPEN ALLOWING WATER TO FLOW INTO THE SINK, OVERFILLING THE SINK, GOING INTO LOWER EQUIPMENT BAY. ALL THE CRITICAL FLIGHT COMPONENTS ARE LOCATED THERE AND AFTER TAKEOFF THE CREW HAD TO RETURN BACK TO HOMEBASE DUE ALL THE FAILED SYSTEMS.

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|-------------------------------|--------|-----|---------|---------|
| 2006FA0000373 | CESSNA | LYC | BRACKET | CRACKED |
|-------------------------------|--------|-----|---------|---------|

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|-----------|-----|-------|----------|-----------------|
| 3/22/2006 | 152 | O235* | 04320049 | HORIZONTAL STAB |
|-----------|-----|-------|----------|-----------------|

3 CRACKS WHERE FOUND ON THE TOP RT OB BOLT HOLE AND ONE CRACK IN WELD JUST AFT OF SAME BOLT HOLE, (NUT PLATES HAD BEEN PREVIOUSLY REMOVED). UNKNOWN CAUSE, AD SHOULD BE REVISED TO REFER

FURTHER INSPECTION OF COMPLETE BRACKET ASSY. (K)

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|-------------------------------|--------|---------|------------|--------------|
| 2006FA0000347 | CESSNA | LYC | CARBURETOR | CONTAMINATED |
| 3/24/2006 | 152 | O235L2C | 105267 | ENGINE |

CONTAMINANT FOUND INSIDE OF THE MAIN JET OF THE CARBURETOR. ENGINE QUIT ON TAKE OFF ROLL. (K)

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|-------------------------------|--------|--|----------|---------|
| 2006FA0000321 | CESSNA | | RIB | MISSING |
| 3/1/2006 | 172 | | 05310051 | RUDDER |

RUDDER WAS REMOVED TO REPLACE CRACKED CORRUGATED SKIN BETWEEN LOWER TWO RIBS. ON SKIN REMOVAL, IT WAS DISCOVERED THAT SLANT RIB 0531005-1, (EXTENSION OF REAR SPAR) WAS MISSING. THERE WERE NO HOLES DRILLED IN BOTTOM RIB P/N 0531001-25 OR RIB P/N 0531001-22 TO WHICH THE SLANT RIB ATTACHES. LOGBOOK INDICATES THAT RUDDER WAS NEVER REPLACED OR REPAIRED, SO THE ASSUMPTION IS THAT THE PART WAS LEFT OUT DURING AIRCRAFT CONSTRUCTION. NEW RIB WAS INSTALLED.

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|-------------------------------|--------|--|-------|-----------------|
| 2006FA0000311 | CESSNA | | FLOAT | FAILED |
| 2/24/2006 | 172H | | | FUEL INDICATION |

LEFT WING FUEL GAGE REGISTERED EMPTY. UPON INSPECTION OF THE FLOAT ASSEMBLY, FOUND FLOAT TO BE ONE THIRD FULL OF FUEL. METAL FLOAT HAS MULTIPLE PIN HOLES. RIGHT SIDE WAS FINE - NO LEAKS.

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|-------------------------------|--------|---------|------------|-------|
| 2006FA0000260 | CESSNA | LYC | OIL COOLER | SPLIT |
| 3/6/2006 | 172M | O360A1A | 8406R | |

DURING ROUTINE RUN-UP FOLLOWING AN OIL CHANGE, AN IMMEDIATE EXPULSION OF SEVERAL QUARTS OF OIL OCCURRED IN SECONDS. (K)

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|-------------------------------|--------|-------|-----------|--------|
| 2006FA0000381 | CESSNA | LYC | STRUT | BROKEN |
| 3/24/2006 | 172N | O360* | 054119810 | MLG |

LANDING GEAR BROKE JUST OUTSIDE OF THE GEAR BOLT. THE FACE OF THE CRACKED AREA APPEARS TO HAVE RUST ON IT THAT COULD INDICATE A PREVIOUS CRACK. (NE01200603823) (K)

| | | | | |
|-------------------------------|--------|----------|--------------|----------|
| 2006FA0000309 | CESSNA | LYC | FLOW DIVIDER | CORRODED |
| 2/24/2006 | 172S | IO360L2A | 63B23440 | ENGINE |

AIRCRAFT FAILED TO START & RUN. NO FUEL FLOW INDICATED ON G-1000. TROUBLESHOOT FUEL SYS & FOUND FUEL NOT PASSING THROUGH FLOW DIVIDER. SENT UNIT FOR REPAIR. AT THAT TIME AIRCRAFT HAD 41.0 HRS SINCE NEW. SECOND TIME AT 91.0 HRS SINCE NEW, HAD THE SAME PROBLEM AS INDICATED AS ABOVE. BOTH TIMES FOUND THE VALVE STEM STUCK INSIDE THE BORE. APPEARS TO BE A RUST/BROWN COLORED CONTAMINATION AND SLIGHT SCORING. FLOWED FUEL INTO TEST JAR AND NO PARTICLES WAS NOTED ON AIRCRAFT FUEL SYSTEM. APPEARS TO BE CORROSION INSIDE BORE. B&S AIRCRAFT POLISHED VALVE STEM AND BORE, OPS. CK. OK.

| | | | | |
|-------------------------------|--------|--|-----------|--------------|
| 2006FA0000313 | CESSNA | | BRACKET | CRACKED |
| 2/26/2006 | 175 | | 051313211 | ENGINE MOUNT |

DURING VISUAL INSPECTION OF UPPER ENGINE MOUNT BRACKETS IN THE UPPER ENGINE MOUNT STRINGER ASSEMBLIES, FOUND THE L/H 0513132-11 BRACKET CRACKED. INSPECTION WAS PERFORMED DUE TO RECENT REPORTS OF FINDING BRACKETS CRACKED ON LIKE MODELS OF AIRCRAFT.

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|-------------------------------|--------|--|-----------|--------------|
| 2006FA0000318 | CESSNA | | BRACKET | CRACKED |
| 2/27/2006 | 175 | | 051313211 | ENGINE MOUNT |

FOUND THE LEFT UPPER ENGINE MOUNT BRACKET P/N 0513132-11 CRACKED THROUGH AROUND THE WASHER. BRACKET IS LOCATED AT THE FRONT OF THE 0513132-3 ENGINE MOUNT STRINGER AND IS DIFFICULT TO SEE DURING ROUTINE INSPECTIONS. INSPECTION WAS PERFORMED DUE TO SEVERAL OTHER CASES OF THE BRACKET BEING FOUND CRACKED ON LIKE AIRCRAFT.

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|-------------------------------|--------|--------|-----------|--------------|
| 2006FA0000399 | CESSNA | CESSNA | BRACKET | CRACKED |
| 3/27/2006 | 175 | | 051313211 | ENGINE MOUNT |

FOUND THE UPPER RIGHT ENGINE MOUNT BRACKET, P/N 0513132-11 IN THE 0513132-4 UPPER ENGINE MOUNT STRINGER, CRACKED. INSPECTION WAS ACCOMPLISHED DUE TO NUMEROUS REPORTS OF THE SAME CONDITION FOUND ON LIKE MODELS OF AIRCRAFT.

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|-------------------------------|--------|--------|-----------|--------------|
| 2006FA0000398 | CESSNA | CESSNA | BRACKET | CRACKED |
| 3/27/2006 | 175 | | 051313211 | ENGINE MOUNT |

FOUND THE UPPER LEFT ENGINE MOUNT BRACKET, P/N 0513132-11 IN THE 0513132-3 UPPER ENGINE MOUNT STRINGER CRACKED THROUGH THE BRACKET AROUND THE RADIUS OF THE WASHER. INSPECTION WAS ACCOMPLISHED DUE TO NUMEROUS REPORTS OF THE SAME CONDITION FOUND ON LIKE MODELS OF AIRCRAFT.

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|-------------------------------|--------|--|-----------|--------------|
| 2006FA0000320 | CESSNA | | BRACKET | CRACKED |
| 3/1/2006 | 175A | | 051313211 | ENGINE MOUNT |

DURING VISUAL INSPECTION FOUND THE 0513132-11 UPPER RIGHT HAND ENGINE MOUNT BRACKET IN THE 0513132-4 STRINGER ASSEMBLY CRACKED. INSPECTION WAS PERFORMED DUE TO OTHER REPORTED FAILURES OF THIS BRACKET ON THE SAME MODEL OF AIRCRAFT. RECOMMEND INSPECTION OF BRACKETS IN ALL AIRCRAFT WITH THE 0513132-4 ENGINE MOUNT STRINGER ASSEMBLY.

| | | | | |
|-------------------------------|--------|--|------------|------------|
| 2006FA0000345 | CESSNA | | BOLT | BACKED OUT |
| 2/15/2006 | 177RG | | NAS4645A15 | NLG |

NOSE LANDING GEAR FAILED TO LOCKDOWN. THE NAS404-5A15 BOLT THAT BOTH SECURES AND PROVIDES A PIVOT POINT FOR THE LOCK ASSY TO THE DRAG LINK HAD BACKED OUT OF THE DRAG LINK TOTALLY DISCONNECTING THE LOCK ASSY FROM THE DRAG LINK. THERE WAS EVIDENCE OF RED LOCKTITE IN THE DRAG LINK AS IS REQUIRED BY THE SRM BUT IT BACKED OUT ANYWAY. THIS BOLT IS NOT A DRILLED HEAD BOLT, BUT I RECOMMEND THAT IT BE REPLACED WITH ONE TO AVOID REOCCURRENCE. (K)

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|-------------------------------|--------|-------|-----------|---------------|
| 2006FA0000353 | CESSNA | CONT | BULKHEAD | CRACKED |
| 3/22/2006 | 182A | O470L | 071220510 | FUSELAGE TAIL |

BULKHEAD, PN 071220510, CRACKED AT TIE DOWN HOLE. BULKHEAD, PN 0712206, CRACKED AT BOLT HOLES ATTACHMENT TO ELEVATOR BELLCRANK SUPPORT MOUNT. (K)

| | | | | |
|-------------------------------|--------|-------|-----------|--------------|
| 2006FA0000352 | CESSNA | CONT | BULKHEAD | CRACKED |
| 3/22/2006 | 182A | O470L | 071220510 | AFT FUSELAGE |

BULKHEAD, PN 071220510, CRACKED AT TIE DOWN HOLE. BULKHEAD, PN 0712206 CRACKED AT BOLT HOLES ATTACHMENT TO ELEVATOR BELLCRANK SUPPORT MOUNT. (K)

| | | | | |
|-------------------------------|--------|--------|---------|--------|
| 2006FA0000302 | CESSNA | CONT | MAGNETO | CHAFED |
| 3/10/2006 | 185F | IO550D | 6310 | ENGINE |

ROUGH MAG IN FLIGHT. FOUND THAT CAPACITOR LEAD WAS INSTALLED ON POINTS BACKWARDS ALLOWING LEAD TO CONTACT MAIN DRIVE GEAR. GEAR HAD EATEN THROUGH INSULATION AND ALL BUT 2 STRANDS OF THE WIRE. MAG WAS NEARING COMPLETE FAILURE.

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|-------------------------------|--------|--------|---------|--------|
| 2006FA0000304 | CESSNA | CONT | MAGNETO | CHAFED |
| 3/10/2006 | 185F | IO550D | 6310 | ENGINE |

ROUGH MAG IN FLIGHT. FOUND THAT CAPACITOR LEAD WAS INSTALLED ON POINTS BACKWARDS ALLOWING LEAD TO CONTACT MAIN DRIVE GEAR. GEAR HAD EATEN THROUGH INSULATION AND ALL BUT 2 STRANDS OF THE WIRE. MAG WAS NEARING COMPLETE FAILURE.

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| 2006FA0000305 | CESSNA | CONT | MAGNETO | CHAFED |
| 3/10/2006 | 185F | IO550D | 6310 | ENGINE |

ROUGH MAG IN FLIGHT. FOUND THAT CAPACITOR LEAD WAS INSTALLED ON POINTS BACKWARDS ALLOWING LEAD TO CONTACT MAIN DRIVE GEAR. GEAR HAD EATEN THROUGH INSULATION AND ALL BUT 2 STRANDS OF THE WIRE. MAG WAS NEARING COMPLETE FAILURE.

| | | | | | |
|--|--------|------------|--------|---------------|-----------------|
| 2006FA0000303 | CESSNA | CONT | | MAGNETO | CHAFED |
| 3/10/2006 | 185F | IO550D | | 6310 | ENGINE |
| ROUGH MAG IN FLIGHT. FOUND THAT CAPACITOR LEAD WAS INSTALLED ON POINTS BACKWARDS ALLOWING LEAD TO CONTACT MAIN DRIVE GEAR. GEAR HAD EATEN THROUGH INSULATION AND ALL BUT 2 STRANDS OF THE WIRE. MAG WAS NEARING COMPLETE FAILURE. | | | | | |
| 2006FA0000357 | CESSNA | LYC | | SERVO | INOPERATIVE |
| 3/13/2006 | 206H | IO540AC1A5 | | 2576543 | ENGINE FUEL SYS |
| AIRCRAFT LANDED AND ENGINE QUIT. TO RESTART ENGINE MIXTURE HAD TO PULL MIXTURE BACK TO .5 INCH OF IDLE CUT TO KEEP ENGINE RUNNING. TRIED TO ADJUST IDLE MIXTURE WITHOUT SUCCESS. AT THE ADJUSTMENT LEANEST SETTING THERE WAS STILL A 600 RPM RAISE WHEN MIXTURE PULLED TO IDLE CUT OFF. REMOVED SERVO AND SENT. REINSTALLED ON RETURN WITH SMALL ADJUSTMENTS ENGINE RAN SATISFACTORY. THIS SAME SYMPTOMS SHOW ON ANOTHER AC WITH SAME PN SERVO. THE AIRCRAFT HAD 129 HOURS, THIS SERVO EXCHANGED FOR AN OVERHAULED UNIT. TECH SUPPORT STATED THAT THE DIAPHRAGMS HAVE SHIFTED AND THE METERING SEATS NEEDED POLISHING. (K) | | | | | |
| 2006FA0000379 | CESSNA | | | ALTERNATOR | OVERTORQUED |
| 4/3/2006 | 207 | | | 10300B | |
| PART RECEIVED O/H FROM STOCK. NO CURRENT OUTPUT WHEN INSTALLED ON AIRCRAFT. BENCH CHECKING RESULTED IN MALFUNCTION OF BRUSH BLOCK HARDWARE DUE TO POSSIBLE OVER TORQUING OF HARDWARE DURING ASSY. COMPONENT WAS OVERHAULED BY CRS NR UT2R226L UNDER W/O NR M940120 DATED AUG 17, 2005, FORM TRACKING NR F082283. (K) | | | | | |
| 2006FA0000387 | CESSNA | | | DEICE SYSTEM | LEAKING |
| 3/28/2006 | 208B | | | 260148830 | WINDSHIELD |
| WATER LEAKS AROUND/THROUGH EDGE SEAL OF WINDSHIELD DE-ICE HOT PLATE AND OBSTRUCTS FORWARD VIEW OF PILOT. THIS WATER FREEZES BETWEEN THE HOT PLATE AND THE WINDSHIELD. IN RAIN CONDITIONS WITH TEMPERATURE ABOVE FREEZING WATER ACCUMULATES AND FILLS 4 TO 5 INCHES OF THE LOWER PORTION OF THE HOT PLATE. THIS WATER FLOATS AROUND THE IN THE LAYER BETWEEN THE HOT PLATE AND THE WINDSHIELD MAKING LANDING THE AC VERY DANGEROUS FROM THE PILOTS SEAT. IN TEMPERATURES BELOW FREEZING THIS WATER FREEZES AND COMPLETELY BLOCKS THE PILOTS FORWARD VIEW. THIS IS THE SECOND HOT PLATE TRIED ON THIS NEW AIRCRAFT WITH TWO DIFFERENT EDGE SEAL CONFIGURATIONS. THE WINDSHIELD DEICE HOT PLATE HAS BEEN REMOVED FROM THIS AC FOR SAFETY. | | | | | |
| 2006FA0000389 | CESSNA | CONT | CESSNA | ACTUATOR | FAILED |
| 1/28/2006 | 210L | IO550* | | 12810281 | RT MLG DOOR |
| MECHANICAL FAILURE OF THE RT MLG DOOR ACTUATOR, PREVENTED THE EXTENSION OF THIS AC LANDING GEAR EITHER BY NORMAL OR EMERGENCY PROCEDURES. THE FAILURE WAS THE ACTUATOR GLAND AND CIRCLIP COMING APART FROM THE ACTUATOR. THE RT MLG ACTUATOR WAS REMOVED AND RESEALED BY A LOCAL MAINTENANCE FACILITY ON 9/24/2004 AT 343.8 HOURS TACH 14.7 HOURS SINCE RESEAL. INVESTIGATION OF THIS INCIDENT WAS INCONCLUSIVE OF WHAT CAUSED THIS FAILURE. (K) | | | | | |
| 2006FA0000332 | CESSNA | | | BULKHEAD | CORRODED |
| 3/27/2006 | 340A | | | 569500511 | LT WING |
| DURING 500 HR. VISUAL INSPECTION PER AD2000-01-16 PARA (D) FOUND LEFT ENGINE AFT CANTED BULKHEAD #5695005-11 AND SUPPORT DOUBLER #5695005-6 CORRODED AND HEAT DAMAGED COMPLETELY THROUGH STRUCTURE. DAMAGE LOCATED NEAR OUTBOARD SECTION ABOVE EXHAUST ELBOW CUT OUT AREA. | | | | | |
| 2006FA0000385 | CESSNA | CONT | | CYLINDER HEAD | SEPARATED |
| 3/31/2006 | 414A | TSIO520BB | | | RT ENG |
| DURING FLIGHT, VIBRATION WAS NOTED ON RT ENGINE. INSPECTED ENGINE AND FOUND NR 6 CYLINDER SEPARATED WHERE BARREL MEETS HEAD. PROBABLE CAUSE: UNKNOWN. RECOMMENDATIONS: THIS IS AN ECI CYLINDER. REFERENCE NEEDS TO BE MADE TO THEM TO RESOLVE THE PROBLEM. (K) | | | | | |

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|---|--------|-----------|---------------|-----------------|
| ISW1520050019 | CESSNA | CONT | ADAPTER | FAILED |
| 2/23/2006 | 421C | GTSIO520N | 643359K46 | STARTER |
| THE ENGINE QUIT RUNNING AND SEIZED DURING FLIGHT. THE STARTER ADAPTER FAILED AND CAUSED THE ENGINE TO SEIZE. MAINTENANCE RECORDS SHOW THAT THE STARTER WAS REPLACED TWO TIMES BECAUSE OF HARD STARTING. ONCE AT 99 HOURS AND AGAIN AT 90 HOURS PRIOR TO ENGINE FAILURE | | | | |
| CWQR2006004 | CESSNA | | DRAIN VALVE | LOOSE |
| 3/8/2006 | 560XL | | 68C48 | STATIC SYSTEM |
| FOUND THE STATIC SYSTEM DRAIN VALVE POPPET RETAINING RING COMING LOOSE FROM VALVE BASE. | | | | |
| CWQR2006006 | CESSNA | | DRAIN VALVE | LOOSE |
| 3/8/2006 | 560XL | | 68C48 | |
| FOUND THE STATIC SYSTEM DRAIN VALVE POPPET RETAINING RING COMING LOOSE FROM VALVE BASE. | | | | |
| CWQR2006007 | CESSNA | | DRAIN VALVE | LOOSE |
| 3/8/2006 | 560XL | | 68C48 | |
| FOUND THE STATIC SYSTEM DRAIN VALVE POPPET RETAINING RING COMING LOOSE FROM VALVE BASE. | | | | |
| CWQR2006001 | CESSNA | | TURNBUCKLE | MISMANUFACTURED |
| 3/2/2006 | 560XL | | 666000216 | CONTROL CABLE |
| DURING A CABLE CHANGE ON THE AILERON SYSTEM, THE PROPER CABLE TENSION COULD NOT BE BROUGHT UP. UPON INSPECTION FOUND NEW CABLE ASSEMBLY TERMINAL END WAS NOT PROPERLY MACHINED. BECAUSE THE NECK (AREA BETWEEN THREADS AND TOOL HOLE) WAS NOT REDUCED THE TURNBARREL BOTTOMS ON THREADS AND CAN NOT BE ADJUSTED TO TENSION REQUIRED. | | | | |
| CWQR2006002 | CESSNA | | OXYGEN BOTTLE | UNSERVICEABLE |
| 3/2/2006 | 750 | | 991406742 | |
| RECEIVED OXYGEN CYLINDER AND REGULATOR FROM CESSNA WITH A CYLINDER BEYOND ITS SERVICE LIFE. BOTTLE HAS 15 YEAR SERVICE LIFE PER CE750 M/M CHAP 5. BOTTLE MFD DATE 9/87. RED TAGGED BOTTLE AND RETURNED TO CESSNA PARTS. | | | | |
| 2006FA0000397 | CESSNA | LYC | FLAP | DAMAGED |
| 2/9/2006 | T182 | O540L3C5 | 052390134 | RT WING |
| ON DEC 4, 2005, THE RT FLAP JAMMED AT THE IB ATTACH ARMS IN ABOUT THE 20 DEGREE POSITION. FLAP MOTOR CONTINUED TO RUN FOR A SHORT PERIOD OF TIME, CAUSING SEVERE DAMAGE AND DISTORTION TO THE JAMMED FLAP, THE PILOT WAS ABLE TO LAND THE AIRPLANE WITHOUT FURTHER INCIDENT. INSPECTION REVEALED THAT THE TIP OF THE RT IB FLAP SUPPORT ARM CAME IN CONTACT WITH A BRACKET ON THE FLAP TRACK RIB ASSY CAUSING THE FLAP TO BIND. REPAIRED BY REPLACING THE RT FLAP INCLUDING ALL THE ROLLERS AND BY REPLACING BOTH BRACKETS ON THE IB FLAP TRACK RIB ASSY. (K) | | | | |
| AOC06001 | CESSNA | CESSNA | ACTUATOR | BROKEN |
| 3/16/2006 | T210L | NA | 12806005 | NLG |
| UPON LANDING, THE NOSE LANDING GEAR COLLAPSED, CAUSING MAJOR DAMAGE TO THE PROPELLER AND DAMAGE TO THE NOSE SECTION OF THE AIRCRAFT. INSPECTION AFTER RECOVERY REVEALED THE THE BEARING END (P/N - 1280600-5) HAD BROKEN, ALSO SHEARING THE PINS (P/N - 1280209-1). NO EVIDENCE OF A PRE-EXISTING CRACK NOTED. PARTS SENT TO CESSNA FOR EVALUATION. | | | | |
| 2006ADP001 | CESSNA | CONT | CYLINDER | CRACKED |
| 2/24/2006 | TU206G | TSIO520M | 655470A3 | ENGINE |
| ALL SIX CYLINDERS HAVE CRACKS IN THE SAME AREA JUST ABOVE THE TOP SPARK PLUG HOLE. | | | | |
| 2006FA0000392 | CESSNA | CONT | MAGNETO | CRACKED |

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|--|--------------|--------------|----------------|------------------|--------------|
| 4/10/2006 | U206F | IO520F | 6310 | ENGINE | |
| CHECKING ENGINE FOR PERSISTENT OIL LEAK, FOUND IT TO BE COMING FROM AREA OF LT MAG. MAG REMOVED AND WAS FOUND TO HAVE 1.5 INCH SECTION OF MOUNTING FLANGE CRACKED OFF. THIS IS THE SECOND MAG ON THIS ENGINE TO HAVE THIS PROBLEM. PREVIOUS MAG WAS TORQUED TO SPECS AS WAS THIS ONE. (K) | | | | | |
| 2006FA0000219 | DIAMON | LYC | RISER | CRACKED | |
| 2/10/2006 | DA40 | IO360A1A | DA403 | ENGINE | |
| ORDERED A NEW EXHAUST RISER FOR THE NR 2 CYLINDER. INSPECTING THE RISER BEFORE INSTALLATION WE FOUND A CRACK AT THE WELD RADIUS OF THE MOUNT FLANGE AND THE EXHAUST PIPE. THIS MAY HAVE ACCURED FROM EXCESS HEAT DURING MANUFACTUR. THIS THE FIRST CRACK SEEN ON NEW RISERS SEAT TO US, BUT WE HAVE HAD 2 IN SERVICE RISERS CRACKED AT 780.4 HOURS AND 2 IN SERVICE RISERS CRACKED. (K) | | | | | |
| CMRR200603009 | DORNER | PWA | HONEYWELL | POWER SUPPLY | FAILED |
| 3/24/2006 | DO328300 | PW306B | DU870 | 7018704902 | DISPLAY UNIT |
| THE EICAS HONEYWELL DU-870 DISPLAY UNIT REFERENCED HEREIN FAILED DURING TAXI PRIOR TO FERRY. THE SUSPECTED SPECIFIC COMPONENT FAILURE IS THE HIGH VOLTAGE POWER SUPPLY UNIT PN:7018704-902 INSTALLED INSIDE THE CRT DISPLAY UNIT. THIS PARTICULAR DU POSITION WAS PREVIOUSLY REPLACED AS WELL ON 3-14-06 BUT THE CUSTOMER DID NOT WANT AN UPGRADED MOD K UNIT INSTALLED. FURTHER INSPECTIONS WILL BE REQUIRED TO VERIFY THE EXACT CAUSE OF DU FAILURE. | | | | | |
| 2006F00011 | DOUG | PWA | CYLINDER | CRACKED | |
| 2/23/2006 | DC6B | CB3 | 327628 | NR 2 ENGINE | |
| NR 2 ENGINE SHUT DOWN DUE ROUGH RUNNING | | | | | |
| 2006FA0000388 | GRUMAV | GARRTT | GRUMAN | RIB | CRACKED |
| 3/7/2006 | S2F | TPE331* | 89T20543 | RT HORIZ STAB | |
| DURING MAINTENANCE ON THE RT SIDE HORIZONTAL STABILIZER, CRACKS WERE ON 2 RIB SECTIONS. CRACKS WERE DETECTED ON RIBS PN 89T920543, STA 138.858 AND PN 89T1029-1, STA 80.608. THESE CRACKS WERE FOUND ON THE UPPER FWD LEADING EDGE TABS WHERE THE RIB ATTACHES TO THE HORIZONTAL STAB SKIN. RIBS WERE REPAIRED IAW THE STRUCTURAL REPAIR MANUAL. (K) | | | | | |
| 2006FA0000211 | GULSTM | | LINE | FRAYED | |
| 2/11/2006 | GULFSTREAMGV | | 1159H5020085 | HYDRAULIC SYS | |
| DUE TO IMPROPERLY POSITIONED ELBOW DURING AIRCRAFT PRODUCTION ON RT MAIN LANDING GEAR DOOR ACTUATOR, FLEX LINE WAS CONTACTING LINE DURING DOOR RETRACTION. THE FLEX LINE DEVELOPED A HYDRAULIC LEAK WHICH IN TURN DEPLETED THE LT AIRCRAFT HYDRAULIC SYSTEM. | | | | | |
| 2006FA0000374 | GULSTM | RROYCE | STOP | BROKEN | |
| 4/3/2006 | GULFSTREAMGV | BR700710A110 | 1159CS52093409 | LT ELEVATOR | |
| DURING SCHEDULED TAIL INSPECTION LT ELEVATOR UP AND DOWN STOP WAS FOUND BROKEN OFF AND LAYING IN ELEVATOR ATTACH/HINGE AREA. (K) | | | | | |
| 2006FA0000266 | ISRAEL | GARRTT | FLEX DUCT | DETERIORATED | |
| 2/17/2006 | 1124 | TFE731* | 4783658519 | CABIN FLOOR DUCT | |
| DURING C-CHECK, BY ACCESS OF FUSELAGE REPAIR, IT WAS FOUND THAT FLEXIBLE AIR CONDITIONING DUCTS WERE BADLY DETERIORATED. FOAM ON INSIDE OF DUCTS WERE COMING LOOSE AND SOME OF DUCTS WERE COLLAPSED. THESE DUCTS ARE JUST PLAIN OLD. MFG TIME LIMITS DO NOT COVER THESE DUCTS AND DURING 800 HOUR C-CHECK AIRFRAME INSP THERE IS NOT A REQUIREMENT TO INSPECT INSIDE OF DUCTS FOR BLOCKAGE OR COLLAPSED DUCTS. FLEX DUCTS CONNECT BELOW THE BLOW AND RUN UP SIDE OF THE FUSELAGE TO LWR AIR CONDITIONING VENTS. THESE ARE NOT HOT AIR DUCTS, UNDER A UNFORSEEN CIRCUMSTANCE, POSES A POSSIBLE FIRE HAZARD IF DUCT TEMPERATURES GET HOT. CALLED MFG TO GET FLEX DUCTS, PN CROSSED TO A NEW STYLE DUCT (PN BWT103080360A.) (K) | | | | | |
| 2006FA0000380 | LEAR | GARRTT | FITTING | MISINSTALLED | |

3/30/2006 35A TFE731* 3751160 TAIL

AIRCRAFT EXPERIENCED HORIZONTAL STABILIZER STALL DURING APPROACH, DURING SEVERE ICING. AIRCRAFT RECOVERED FROM STALL AND LANDING NORMAL. INSPECTION OF TAIL DE-ICE SYSTEM FOUND BLEED AIR LEAKING IN AFT PART OF TAIL AT 90 DEGREE ELBOW. DURING REMOVAL OF 90 DEGREE ELBOW IT WAS FOUND THAT THE WIGGINS SEALS WERE INSTALLED INCORRECTLY, UNABLE TO DETERMINE WHEN THIS FITTING WAS INSTALLED. COULD HAVE COME FROM MFG DURING PRODUCTION. HAS NOT BEEN CHANGED BY OWNER IN 11 YEARS. TAIL AND WING HEAT FUNCTIONAL CHECKED NORMAL AT LAST INSPECTION. NO INFO IN MM FOR INSTALLING THIS TYPE. (K)

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| 2006FA0000249 | LEAR | GARRTT | GASKET | LEAKING |
| 2/15/2006 | 55LEAR | TFE7313A | 553008 | O2 MASK |

PILOT O2 MASK HAD ORIGINAL O/H DATE OF 6/05. MASK WAS PLACED IN SERVICE IN AC 55093. MASK DID NOT TEST PROPERLY AT DELIVERY DATE OF 6/23/05. MASK WAS SENT BACK, FOUND TO HAVE A LEAK. MASK WAS REPAIRED AND SENT BACK TO AC. MASK WAS FOUND TO BE LEAKING AGAIN AFTER 2 WEEKS IN AIRCRAFT. AGAIN, IT WAS REPAIRED. PLACED BACK IN SERVICE, AFTER 2 MONTHS MASK WAS FOUND LEAKING AGAIN. IT WAS SENT BACK FOR ANOTHER REPAIR, DATED 12/5/05. MASK HAS BEEN FOUND TO BE LEAKING FOR FOURTH TIME, SENT BACK FOR FOURTH TIME FOR REPAIR. 4 REPAIRS ON THIS MASK SINCE O/H DATE OF 6/05 IS UNACCEPTABLE. HAVE SERIOUS DOUBTS AS TO CAPABILITIES TO MAKE OVERHAULS AND REPAIRS THAT LAST. PILOT O2 MASK IS VERY CRITICAL COMPONENT.

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|-------------------------------|--------|--|------|---------|
| 2006FA0000329 | LEAR | | BOOT | DAMAGED |
| 10/26/2005 | 60LEAR | | | WINGS |

INADVERTTENT ACTIVATION OF ANTI-ICE SYSTEM ON GROUND, RESULTING IN DAMAGE TO ANTI-ICE BOOTS WAS CAUSED BY AN INTERMITTENT GROUND OF CIRCUIT THAT IS NORMALLY OPEN. THE WIRE NR H255A20 RUNS FROM THE CONTROLLER TO THE REMOTE CIRCUIT BREAKER. (K)

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|-------------------------------|--------|--|-----------|----------|
| 2006FA0000361 | LEAR | | FLEX LINE | RUPTURED |
| 3/10/2006 | 60LEAR | | 605700311 | HYD SYS |

DURING FLIGHT, LOST NR 1 HYDRAULIC PRESSURE, DIVERTED INTO AIRPORT AND LANDED WITHOUT INCIDENT. TROUBLESHOOT AND FOUND RUPTURED HYDRAULIC FLEX LINE, PN 605700311 WHICH IS MOUNTED ON THE PRESSURE SIDE OF THE HYDRAULIC EDP. INSTALLED NEW HYDRAULIC FLEX LINE WITH PN 605700311. (K)

| | | | | |
|-------------------------------|--------|-------|------------|------------|
| 2006FA0000259 | LEAR | PWA | CASTING | BENT |
| 3/7/2006 | 60LEAR | PW305 | 2424000258 | LT AILERON |

INCOMING INSPECTION FOUND AILERON DRIVE YOKE ATTACH CASTING BENT. UPON FURTHER INSPECTION IT WAS DISCOVERED THE DRIVE YOKE UPPER OR LOWER SHIMS WERE NOT INSTALLED. DRIVE YOKE ATTACH BOLT WAS INSTALLED CAUSING THE CASTING TO BE BENT AND REQUIRES REPLACEMENT BY OEM. THIS COULD HAVE BEEN PREVENTED BY FOLLOWING MAINTENANCE MANUAL INSTALLATION INSTRUCTIONS. (K)

| | | | | |
|-------------------------------|--------|--|----------|----------|
| AUCR200600002 | LKHEED | | SPAR CAP | CORRODED |
| 3/21/2006 | P3A | | 9010622 | WING |

UPPER REAR SPAR CAP STRESS CORROSION CRACKED IN AFT RADIUS FORWARD OF NR 4 FLAP HANGER. DAMAGE CENTERED AT WS275. DAMAGE WAS INITIALLY DETECTED VISUALLY DURING SCHEDULED SPECIAL INSPECTION. DAMAGE WAS FURTHER EVALUATED WITH EDDY CURRENT INSPECTION AND WAS FOUND TO EXCEED THE PARAMETERS OF THE SRM. US TECHNICAL ENGINEERING HAS BEEN CONTRACTED TO GENERATE AN APPROVED REPAIR.

| | | | | |
|-------------------------------|-------|--|-------|----------|
| 2006FA0000394 | PIPER | | SPAR | CORRODED |
| 4/1/2006 | J3C* | | 42972 | AILERON |

AILERON SPARS FOUND EXCESSIVE CORROSION UNDER ALL 3 HINGES. NEEDED TO REPLACE SPAR ON BOTH LT AND RT AILERONS BEFORE RECOVERING AILERONS. (K)

| | | | | |
|-------------------------------|---------|--------|-------------|------------|
| 2006FA0000386 | PIPER | LYC | COOLING FAN | BURNED |
| 4/5/2006 | PA23250 | IO540* | 553002 | INST PANEL |

AFTER STARTING ENGINES, THE PILOT SMELLED SMOKE AND OBSERVED FLAMES BEHIND CO-PILOTS INSTRUMENT PANEL. ENGINES WERE SHUTDOWN. WHEN MASTER SWITCH WAS TURNED OFF, THE FLAME WENT OUT. INVESTIGATION REVEALED THAT THE AVIONICS COOLING FAN HAD CAUGHT FIRE. (K)

| | | | | | |
|-------------------------------|---------|---------|----------|-----------|--------------|
| 2006FA0000383 | PIPER | LYC | JANITROL | REGULATOR | LEAKING |
| 3/6/2006 | PA23250 | TIO540* | | A23D04 | CABIN HEATER |

AIRCRAFT RECEIVED FROM NEW OWNER WANTING HEATER MADE OPERATIONAL: TOTALLY DEACTIVATED. REPLACED HEATER ASSY DUE TO EXTREME DETERORATION. FUEL REGULATOR REPLACED DUE TO LEAKAGE AND FAILURE TO REGULATE. FOUND INLET PORT PARTIALLY PLUGGED BY CORROSSION BY-PRODUCTS AND REMNANTS OF DAMAGED THREADS. N/E REPAIRABLE. (K)

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|-------------------------------|---------|---------|--|-----------|--------------|
| 2006FA0000331 | PIPER | LYC | | REGULATOR | LEAKING |
| 3/6/2006 | PA23250 | TIO540* | | A23D0475 | CABIN HEATER |

AIRCRAFT RECEIVED FROM NEW OWNER WANTING HEATER MADE OPERATIONAL: TOTALLY DEACTIVATED. REPLACED HEATER ASSY DUE TO EXTREME DETORATION. FUEL REGULATOR REPLACED DUE TO LEAKAGE AND FAILURE TO REGULATE FOUND INLET PORT PARTIALLY PLUGGED BY CORROSION BY-PRODUCTS AND REMNANTS OF DAMAGED THREADS. N/E REPAIRABLE. (K)

| | | | | | |
|-------------------------------|---------|--|--|----------|----------|
| 2006FA0000339 | PIPER | | | SPAR | CORRODED |
| 3/17/2006 | PA28140 | | | 62054000 | LT WING |

DURING 100 HR INSPECTION ON REAR SPAR CHANNEL, RIVET HEADS WERE POPPED ON BOTH SIDES. A COMPLETE INSPECTION REVEALED SEVERE CORROSION BETWEEN CHANNEL AND STEEL PLATES. ALSO, SEVERE CORROSION EXISTED BETWEEN REAR IB ATTACH FITTINGS TO SPAR. THE ATTACH FITTINGS HID VIEW FROM THE OUTSIDE. WITH NO INSPECTION PANELS IN THAT AREA THE INSPECTION HAS TO BE MADE THROUGH THE IB RIB LOOKING AFT. THE STRUCTURAL INTEGRITY OF THE LT SPAR ATTACH AREA WAS SEVERELY COMPROMISED. (K)

| | | | | | |
|-------------------------------|---------|-------|--|---------|----------|
| 2006FA0000338 | PIPER | LYC | | SPAR | CORRODED |
| 3/17/2006 | PA28140 | O320* | | PA28140 | WING |

DURING 100 HR INSPECTION ON REAR SPAR CHANNEL, RIVET HEADS WERE POPPED ON BOTH SIDES. A COMPLETE INSPECTION REVEALED SEVERE CORROSION BETWEEN CHANNEL AND STEEL PLATES. ALSO, SEVERE CORROSION EXISTED BETWEEN REAR IB ATTACH FITTINGS TO SPAR. THE ATTACH FITTINGS HID VIEW FROM THE OUTSIDE. WITH NO INSPECTION PANELS IN THAT AREA THE INSPECTION HAS TO BE MADE THROUGH THE IB RIB LOOKING AFT. THE STRUCTURAL INTEGRITY OF THE LT SPAR ATTACH AREA WAS SEVERELY COMPROMISED. (K)

| | | | | | |
|-------------------------------|---------|--|--|---------|------------------|
| 2006FA0000390 | PIPER | | | HARNESS | FAILED |
| 3/20/2006 | PA28161 | | | 45402 | SHOULDER HARNESS |

HAVE HAD NUMEROUS PROBLEMS WITH PACIFIC SCIENTIFIC INERTIA REELS, PN 1107447-29, MFG PN 564-863 (PS50039-4-49). THESE HARNESSES DO NOT RETURN AND/OR DO NOT FUNCTION UNDER A SUDDEN LOAD. ON OCCASION, HAVE FOUND THEM BAD STRAIGHT OUT OF THE BOX. THEY ARE ALSO VERY SUSCEPTABLE TO WARPAGE/ MALFUNCTION UPON INSTALLATION. (K)

| | | | | | |
|-------------------------------|----------|--|--|------------------|--------------|
| 2006FA0000396 | PIPER | | | HYDRAULIC SYSTEM | CONTAMINATED |
| 8/8/2005 | PA28R180 | | | | MLG |

ON TAKEOFF ROLL, EXPERIENCED A LT MAIN GEAR DOWN LOCK DISENGAGEMENT, RESULTING IN MINOR DAMAGE TO THE UNDERSIDE OF THE LT WING SKIN, SHUTTLE VALVE IN THE POWER PACK WAS STICKY, CAUSED BY THE SEDIMENTS IN LWR PARTS OF FLUID RESERVOIR. HYDRAULIC CYLINDERS WERE TESTED AND FOUND TO HAVE EXCESSIVE INTERNAL LEAKAGE IN THE GEAR DOWN POSITION; THE PISTON SEALS WERE NOTED TO BE VISIBLY WORN. THE BACKUP EXTENDER/OVERRIDE VALVE WAS TESTED AND FOUND TO HAVE INTERNAL LEAKAGE. THE PROBABLE CAUSE OF THE LT MAIN GEAR DOWN LOCK DISENGAGEMENT APPEARS TO BE RELATED TO SEDIMENT WITHIN THE HYDRAULIC POWER PACK RESERVOIR. (K)

| | | | | | |
|-------------------------------|-------|--|--|---------------|--------|
| 2006FA0000371 | PIPER | | | CONTROL CABLE | FRAYED |
|-------------------------------|-------|--|--|---------------|--------|

3/1/2006 PA28R201 62701099 LT WING

WHILE CONDUCTING AN ANNUAL INSPECTION PRIOR TO PLACING THE AIRCRAFT ON LINE AFTER PURCHASING IT FROM A LOCAL OPERATOR THE LT FORWARD AILERON BALANCE CABLE WAS FOUND TO BE BADLY WORN AND FRAYED. RESEARCH OF THE MAINTENANCE RECORDS SHOWED THAT THE PREVIOUS OWNERS HAD FAILED TO COMPLY WITH SB 1048 WHICH REQUIRES REPETITIVE INSPECTIONS OF ALL FLIGHT CONTROL CABLES. THIS SB WAS APPLICABLE TO THIS AIRCRAFT. (K)

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|-------------------------------|----------|--|----------------|---------|
| 2006FA0000140 | PIPER | | ATTACH FITTING | DAMAGED |
| 1/19/2006 | PA28R201 | | 402915 | LT WING |

DURING PHASE INSPECTION LT AFT WING ATTACH BOLT WAS FOUND LOOSE. UPON FURTHER INSP AS PER PIPER SL 1087 THE HOLE WAS FOUND TO BE ELONGATED AND BOLT SHANK WORN. SL 1087 DOES NOT COVER THIS S/N BUT DOES COVER MODEL.

| | | | | |
|-------------------------------|----------|----------|----------|----------|
| 2006FA0000364 | PIPER | LYC | CABLE | FRAYED |
| 3/1/2006 | PA28R201 | IO360A1A | 62701124 | FUSELAGE |

WHILE CONDUCTING AN ANNUAL INSPECTION PRIOR TO PLACING THE AIRCRAFT ONLINE AFTER PURCHASING IT FROM A LOCAL OPERATOR THE RT AILERON BALANCE CABLE WAS FOUND TO BE BADLY WORN AND FRAYED WITH ONLY A FEW STRANDS LT INTACT. RESEARCH OF THE MAINTENANCE RECORDS SHOWED THAT THE PREVIOUS OWNERS HAD FAILED TO COMPLY WITH SB WHICH REQUIRES REPETITIVE INSPECTIONS OF ALL FLIGHT CONTROL CABLES. THIS SB WAS APPLICABLE TO THIS AIRCRAFT. (K)

| | | | | |
|-------------------------------|----------|----------|----------|----------|
| 2006FA0000365 | PIPER | LYC | CABLE | FRAYED |
| 3/1/2006 | PA28R201 | IO360A1A | 62701103 | FUSELAGE |

WHILE CONDUCTING AN ANNUAL INSPECTION PRIOR TO PLACING THE AIRCRAFT ONLINE AFTER PURCHASING IT FROM A LOCAL OPERATOR THE LT STABILATOR CABLE WAS FOUND TO BE BADLY WORN AND FRAYED WITH ONLY A FEW STRANDS LT INTACT. RESEARCH OF THE MAINTENANCE RECORDS SHOWED THAT THE PREVIOUS OWNERS HAD FAILED TO COMPLY WITH SB WHICH REQUIRES REPETITIVE INSPECTIONS OF ALL FLIGHT CONTROL CABLES. THIS SB WAS APPLICABLE TO THIS AIRCRAFT. (K)

| | | | | |
|-------------------------------|----------|----------|----------|----------|
| 2006FA0000366 | PIPER | LYC | CABLE | FRAYED |
| 3/1/2006 | PA28R201 | IO360A1A | 62701102 | FUSELAGE |

WHILE CONDUCTING AN ANNUAL INSPECTION PRIOR TO PLACING THE AIRCRAFT ONLINE AFTER PURCHASING IT FROM A LOCAL OPERATOR THE RT FWD STABILATOR CABLE WAS FOUND TO BE BADLY WORN AND FRAYED. RESEARCH OF THE MAINTENANCE RECORDS SHOWED THAT THE PREVIOUS OWNERS HAD FAILED TO COMPLY WITH SB WHICH REQUIRES REPETITIVE INSPECTIONS OF ALL FLIGHT CONTROL CABLES. THIS SB WAS APPLICABLE TO THIS AIRCRAFT. (K)

| | | | | |
|-------------------------------|----------|----------|---------------|--------|
| 2006FA0000369 | PIPER | LYC | CONTROL CABLE | FRAYED |
| 3/1/2006 | PA28R201 | IO360A1A | 62701123 | WING |

WHILE CONDUCTING AN ANNUAL INSPECTION PRIOR TO PLACING THE AIRCRAFT ONLINE AFTER PURCHASING IT FROM A LOCAL OPERATOR THE LT AILERON BALANCE CABLE WAS FOUND TO BE BADLY WORN AND FRAYED. THE LOCATION OF THE FRAYING WAS AT THE 1ST IB PULLEY IN THE WING ROOT. THIS IS A KNOWN AREA OF WEAR FOR ALL PA 28, 34, AND 44 MODEL AIRCRAFT. RESEARCH OF THE MAINTENANCE RECORDS SHOWED THAT THE PREVIOUS OWNERS HAD FAILED TO COMPLY WITH SB WHICH REQUIRES REPETITIVE INSPECTIONS OF ALL FLIGHT CONTROL CABLES. THIS SB WAS APPLICABLE TO THIS AIRCRAFT. (K)

| | | | | |
|-------------------------------|----------|----------|---------------|----------|
| 2006FA0000368 | PIPER | LYC | CONTROL CABLE | FRAYED |
| 3/1/2006 | PA28R201 | IO360A1A | 62701100 | FUSELAGE |

WHILE CONDUCTING AN ANNUAL INSPECTION PRIOR TO PLACING THE AIRCRAFT ONLINE AFTER PURCHASING IT FROM A LOCAL OPERATOR THE RT FWD RUDDER CABLE WAS FOUND TO BE BADLY WORN AND FRAYED. THE LOCATION OF THE FRAYING WAS JUST UNDER THE CENTER CONSOLE FOR THE STABILATOR TRIM AND JUST AS IT EXITED IN TO THE INSPECTION AREA UNDER THE REAR SEATS AT THE FORWARD PULLEY. THIS IS A KNOWN AREA OF WEAR FOR ALL PA 28, 34, AND 44 MODEL AIRCRAFT. RESEARCH OF THE MAINTENANCE RECORDS SHOWED THAT THE PREVIOUS OWNERS HAD FAILED TO COMPLY WITH SB WHICH REQUIRES REPETITIVE

INSPECTIONS OF ALL FLIGHT CONTROL CABLES. THIS SB WAS APPLICABLE TO THIS AIRCRAFT. (K)

| | | | | |
|-------------------------------|----------|----------|---------------|--------|
| 2006FA0000370 | PIPER | LYC | CONTROL CABLE | FRAYED |
| 3/1/2006 | PA28R201 | IO360A1A | 62701124 | WING |

WHILE CONDUCTING AN ANNUAL INSPECTION PRIOR TO PLACING THE AIRCRAFT ONLINE AFTER PURCHASING IT FROM A LOCAL OPERATOR THE RT AILERON BALANCE CABLE WAS FOUND TO BE BADLY WORN AND FRAYED WITH ONLY 1 STRAND LEFT HOLDING IT TOGETHER. THE LOCATION OF THE FRAYING WAS AT THE 1ST IB PULLEY IN THE WING ROOT. THIS IS A KNOWN AREA OF WEAR FOR ALL PA 28, 34, AND 44 MODEL AIRCRAFT. RESEARCH OF THE MAINTENANCE RECORDS SHOWED THAT THE PREVIOUS OWNERS HAD FAILED TO COMPLY WITH SB 1048 WHICH REQUIRES REPETITIVE INSPECTIONS OF ALL FLIGHT CONTROL CABLES. THIS SB WAS APPLICABLE TO THIS AIRCRAFT. (K)

| | | | | |
|-------------------------------|----------|----------|----------|----------|
| 2006FA0000363 | PIPER | LYC | CABLE | FRAYED |
| 3/1/2006 | PA28R201 | IO360A1A | 62701100 | FUSELAGE |

WHILE CONDUCTING AN ANNUAL INSPECTION PRIOR TO PLACING THE AIRCRAFT ONLINE AFTER PURCHASING IT FROM A LOCAL OPERATOR, BOTH FORWARD RUDDER CABLES WERE FOUND TO BE BADLY WORN AND FRAYED. RESEARCH OF THE MAINTENANCE RECORDS SHOWED THAT THE PREVIOUS OWNERS HAD FAILED TO COMPLY WITH SB WHICH REQUIRES REPETITIVE INSPECTIONS OF ALL FLIGHT CONTROL CABLES. THIS SB WAS APPLICABLE TO THIS AIRCRAFT. (K)

| | | | | |
|-------------------------------|----------|----------|----------|----------|
| 2006FA0000367 | PIPER | LYC | CABLE | FRAYED |
| 3/1/2006 | PA28R201 | IO360A1A | 62701100 | FUSELAGE |

WHILE CONDUCTING AN ANNUAL INSPECTION PRIOR TO PLACING THE AIRCRAFT ONLINE AFTER PURCHASING IT FROM A LOCAL OPERATOR THE LT FORWARD STABILATOR CABLE WAS FOUND TO BE BADLY WORN AND FRAYED. THE AREA OF FRAYING WAS LOCATED UNDER THE REAR SEATS IN THE INSPECTION AREA AT THE REAR PULLEYS. THIS IS A KNOWN AREA OF WEAR FOR ALL PA 28, 34, AND 44 MODEL AIRCRAFT. RESEARCH OF THE MAINTENANCE RECORDS SHOWED THAT THE PREVIOUS OWNERS HAD FAILED TO COMPLY WITH SB WHICH REQUIRES REPETITIVE INSPECTIONS OF ALL FLIGHT CONTROL CABLES. THIS SB WAS APPLICABLE TO THIS AIRCRAFT. (K)

| | | | | |
|-------------------------------|----------|-----------|-------|---------|
| 2006FA0000328 | PIPER | LYC | SHAFT | SHEARED |
| 3/9/2006 | PA28R201 | IO360C1C6 | M3548 | MAGNETO |

ENGINE RUNUP INDICATED A DEAD MAGNETO. REMOVED AND DISASSEMBLED MAGNETO HOUSING. FOUND ROTOR SHAFT SHEARED OFF AT BOTTOM OF CAM SLOT. A FEW CRACKED SHAFTS HAVE BEEN FOUND AT 500 HR INSPECTIONS. RECOMMEND CLOSE INSPECTION OF THIS AREA AT REPAIR AND OVERHAUL. (K)

| | | | | | |
|-------------------------------|-------|-----------|-----------|------------|---------|
| 2006FA0000391 | PIPER | LYC | CLEVELAND | BRAKE DISC | CRACKED |
| 3/29/2006 | PA31 | TIO540A2B | | 16403506 | WHEEL |

FOUND CRACK IN BRAKE DISC ON OUTER EDGE. CRACK STARTED ON THE (P) IN PARKER FROM THE STAMPED NAME, MODEL, DATE, AND SN. WHEN STAMPED COULD HAVE CAUSED A STRESS CRACK. THE USE OF AN INK STAMP WOULD NOT CAUSE ANY STRESS ON THE DISC. (K)

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|-------------------------------|---------|---------|--------|--------|
| 2006FA0000267 | PIPER | LYC | SWITCH | FAILED |
| 2/28/2006 | PA31325 | TIO540* | 487862 | RMLG |

AFTER SELECTING (GEAR DOWN), PILOT WAS UNABLE TO GET A GREEN LIGHT FOR RT MLG, IN EITHER NORMAL OR EMERGENCY EXTENSIONS. GROUND OBSERVERS ADVISED RMLG WAS DOWN AND IB GEAR DOORS WERE OPEN. UNEVENTFUL LANDING FOLLOWED. INVESTIGATION REVEALED RMLG DOWNLOCK SWITCH FAILED ELECTRICALLY. SWITCH WAS REPLACED, SEVERAL GEAR CYCLES ON JACKS. AIRCRAFT TEST FLOWN, SATISFACTORY. (K)

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|-------------------------------|-------|--------|----------------|------------|
| 2006FA0000312 | PIPER | PWA | HOSE | DAMAGED |
| 2/24/2006 | PA31T | PT6A28 | 156F00512D0260 | ENGINE OIL |

DURING CLIMB, PILOT NOTED RT OIL PRESS FLUTUATING SLIGHTLY & SLOWLY FALLING. ENGINE SHUTDOWN & RETURNED TO BASE. INVESTIGATION REVEALED A LEAKING OIL COOLER HOSE. LEAK POINT COVERED BY FIRESLEEVEING. HOSE REMOVED & SLEEVEING CUT OPEN REVEALING WIRE BRAID. EXTERNAL EXAMINATION DID

NOT INDICATE ANY OBVIOUS VISIBLE DEFECT. FURTHER INVESTIGATION USING A FLEXIBLE LIGHT SOURCE REVEALED A FAILED INNER WALL MID-WAY IN THE HOSE AND ON THE INSIDE RADIUS OF THE HOSE BEND. THE HOSE MANF. DATE 01/04. PROBABLE CAUSE WAS INCORRECT HANDLING OR INSTALLATION OF HOSE AT SOME POINT WHICH RESULTED IN KINKING OF THE HOSE AND EVENTUAL FAILURE OF THE INNER WALL.

| | | | |
|-------------------------|---------|----------|--------------|
| 5784607 | PIPER | ARM | BROKEN |
| 2/15/2006 | PA32300 | 63457003 | RUDDER CONTR |

ONE OF THE THE CLIPS (PIPER PN 62832-000) IN THE RUDDER TRIP TUBE YIELDED AND SLIPPED OVER THE END OF THE SPRING. THIS CAUSED THE RUDDER TRIM SPRING TO BIND IN ITS TUBE, RESULTING IN THE RUDDER CONTROL ARM (PIPER PN 63457-003) BREAKING WHERE THE TRIM ATTACHES. THIS CAUSED LOSS OF RUDDER TRIM AND NOSE-WHEEL CENTERING. RUDDER CONTROL AND NOSEWHEEL STEERING WERE UNAFFECTED. I HAVE PHOTOS OF THE FAILED PARTS I CAN EMAIL IF SOMEONE LET'S ME KNOW WHERE TO SEND THEM.

| | | | | |
|-------------------------------|----------|-------|---------|---------|
| 2006FA0000372 | PIPER | CONT | AXLE | CRACKED |
| 3/9/2006 | PA34220T | O300* | 3948903 | MLG |

CRACKS IN BOTH UPPER BOLT HOLES THAT SECURE AXLE TO STRUT ASSEMBLY ON BOTH LT AND RT MLG. PROBABLE CAUSE MAYBE HARD LANDING OR FATIGUE CRACKS DO TO NORMAL USE. (K)

| | | | | |
|-------------------------------|---------|-------|---------|----------|
| 2006FA0000344 | PIPER | LYC | CABLE | JAMMED |
| 3/17/2006 | PA44180 | O360* | 8646002 | FUSELAGE |

PILOT REPORTED THAT STABILATOR TRIM WAS JAMMING IN THE NOSE-UP POSITION. IT WAS DISCOVERED THAT TRIM CABLE TURNBUCKLE WAS CATCHING ON BULKHEAD JAMMING CABLE. CABLE TENSIONS WERE ADJUSTED TO SPECIFICATIONS AND PROBLEM REPEATED. RECOMMEND SLIGHT RADIUS OF MATERIAL AND REINFORCEMENT OF AFFECTED AREA TO PREVENT RECURRENCE OF PROBLEM. (K)

| | | | |
|-------------------------------|----------|------------|--------|
| 2006FA0000337 | PIPER | ALTERNATOR | BURNED |
| 4/6/2006 | PA46350P | ALU8539LS | ENGINE |

OUTPUT POST WAS LOOSE AND BURNED. TERMINAL ON OUTPUT WIRE GOING TO BOSS BAR WAS BURNED, MELTED, AND SEPARATED FROM ALTERNATOR. (K)

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|-------------------------------|---------|---------------|------------|
| 2006FA0000403 | PIPER | BRACKET | CRACKED |
| 4/19/2006 | PA60600 | 2000610102501 | RIGHT WING |

FWD WING ATTACHMENTS, LEFT & RIGHT WINGS, FWD & AFT BRACKETS WERE NEVER RIVETED TO TOP & BOTTOM WING SKINS & INBOARD RIB FLANGES ALLOWING ALL LOADING TO BE TAKEN BY BRACKET FLANGES & INBD WING RIBS. ALL 4 BRACKETS ARE CRACKED. PICTURES AVAILABLE.

| | | | |
|-------------------------------|-------------|--------------|----------|
| 2006FA0000326 | RAYTHN | ART HORIZION | MISWIRED |
| 4/7/2006 | HAWKER800XP | | COCKPIT |

PILOT REPORTED STANDBY ARTIFICIAL HORIZON ILS NEEDLES MOVE IN OPPISITE DIRECTION OF #1 AND #2 ILS NEEDLES ON ILS APPROACH. CONFIRMED REPORT. FOUND THAT ARKANSAS AEROSPACE COMPLETION DRAWINGS(WERE NOT CORRECT WHEN COMPARED TO HONEYWELL RNZ-850 INSTALLATION MANUAL. RNZ-850 PIN B78 VOR LFT DEVIATION WAS WIRED TO STANDBY HORIZON (JET ADI-322B) PIN G NAV DEVIATION +RT. RNZ-850 PIN B75 DEV RTN WAS WIRED TO ADI-322B PIN H NAV DEVIATION + LT. SWAPPED WIRES AT ADI-322B AND TESTED. ILS DEVIATION LEFT AND RIGHT NOW MATCHES PRIMARY ILS DISPLAYS.

| | | | | |
|-------------------------------|-------|-----|---------|--------------|
| 2006FA0000213 | RYAN | ACK | BATTERY | MISINSTALLED |
| 2/17/2006 | ST3KR | | | ELT |

DURING REPLACEMENT OF BATTERIES FROM ELT CASE, MODERATE FORCE WAS NEEDED TO REMOVE THE BOTTOM 4 BATTERIES. THE FIT OF THE NEW BATTERIES INTO THE CASE WAS VERY TIGHT. AFTER CLOSING THE ELT CASE, THE ELT BECAME HOT TO THE TOUCH. SUSPECTING AN ELECTRICAL SHORT CIRCUIT, THE NEW BATTERIES WERE REMOVED. UPON EXAMINING THE NEW BATTERIES JUST REMOVED, IT WAS FOUND THAT THE PROTECTIVE COVERING ON THE TERMINAL END OF THE BATTERIES WAS SCRAPED AWAY. THIS MUST HAVE HAPPENED BY SLIDING THE BATTERIES INTO THE TIGHT CASE. THE RELATIVE BARE SPOTS ON THE BATTERIES WOULD ACCOUNT FOR A SHORT CIRCUITING OF THE BATTERIES THAT CAUSED THE ELT TO OVERHEAT. IT IS BELIEVED THAT THE TECHNIQUE USED TO INSERT THE BATTERIES INTO THE ELT CASE IS CRITICAL IN GUARDING

AGAINST PREMATURE FAILURE OR EVEN AN ELECTRICAL FIRE.

| | | | | |
|-------------------------------|---------|----------|------------|---------|
| 2006FA0000268 | SNIAS | TMECA | RING | CRACKED |
| 3/2/2006 | AS350B3 | ARRIEL2B | 0292817220 | ENGINE |

IN COMPLIANCE WITH AD AND SB, OUR MECHANIC WAS INSPECTING THE ABOVE DESCRIBED ENGINE AND FOUND THE COMPONENT LISTED BELOW TO BE OUT OF SERVICEABLE LIMITS AS INDICATED IN THE 2 DOCUMENTS. REMOVED THE CONTAINMENT RING FROM SERVICE AND INSTALLED A NEW POST MOD TU-22 RING AS ADVISED. (K)

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|-------------------------------|--------|------|----------|---------|
| 2006FA0000349 | UNIVAR | CONT | SPAR CAP | CRACKED |
| 3/28/2006 | 415C | C90* | | RT WING |

DURING ACCOMPLISHMENT OF SB NR 32, A 0.625 INCH LONG, SPANWISE CRACK WAS NOTED ON THE RT UPPER SPAR CAP IN THE MAIN SPAR CENTER SECTION APPROX 0.250 INCH IB OF THE CENTER SECTION OB END. PROBABLE CAUSE IS UNKNOWN. (K)

| | | | | |
|-------------------------------|--------|--|--------------|-----------------|
| 2006FA0000362 | UROCOP | | PLATE | UNBONDED |
| 3/14/2006 | EC120B | | C622A1002104 | MAIN ROTOR HEAD |

LOWER DROOP RING WEAR PLATE BECAME UNBONDED AND CAME OFF THE MAIN ROTOR HUB. THE ENTIRE PLATE WAS FOUND APPROXIMATELY 20 FT FROM THE AIRCRAFT. IT IS NOT CLEAR WHETHER THE PART FELL OFF DURING ENGINE START UP OR SHUTDOWN. WE BELIEVE THE UNBONDING TO BE THE RESULT OF THE DROOP RING STOPS COMING INTO CONTACT WITH THE WEARPLATE, DURING PERIODS OF TIME WHEN THE AIRCRAFT IS STATIC ON THE RAMP AND SUBJECT TO HIGH WINDS. RECOMMEND SECURING THE MAIN ROTOR BLADES WHEN THE PREVAILING WINDS REACH 15 KNOTS. (K)

| | | | | |
|-------------------------------|---------|----------|------------|---------|
| 2006FA0000355 | UROCOP | TMECA | HMU | UNKNOWN |
| 3/18/2006 | EC130B4 | ARRIEL2B | 0292858570 | ENGINE |

PRECAUTIONARY LANDING DUE TO BANG HEARD IN FLIGHT BY PILOT. NORMAL LANDING ACCOMPLISHED W/O ACCIDENT, OR INJURIES. AC LANDED ON PRIVATE PROPERTY. UPON LANDING, GOVERNOR WARNING LIGHT ILLUMINATED. SUBSEQUENT INVESTIGATIVE TROUBLESHOOTING REVEALED VEMD TO DISPLAY A CODE (192) HMU FAULT, INDICATING A FAILURE OF EBCAU STEPPER MOTOR. VISUALLY INSPECTED ENG ASSY AND SURGE BLEED VALVE ASSY. NO DEFECTS NOTED, HMU AND EBCAU UNITS WERE REPLACED WITH SERVICABLE UNITS. GROUND AND FLIGHT TESTS PROVED GOOD WITH NO INDICATED ERROR CODES. AC TEST FLOWN BACK TO MAINTENANCE BASE WITH NO FURTHER PROBLEMS NOTED. DETERMINED THE INITIAL BANG HEAR IN FLIGHT WAS MOST LIKELY A COMPRESSOR STALL DUE TO THE MALFUNCTION HMU. (K)

END OF REPORTS